

FIG. 1 is a schematic diagram of a network system. The system includes a central server and multiple client computers. The server is connected to a network bus, which in turn connects to each of the client computers. The client computers are labeled "CLIENT" and the server is labeled "SERVER".

FIG. 1

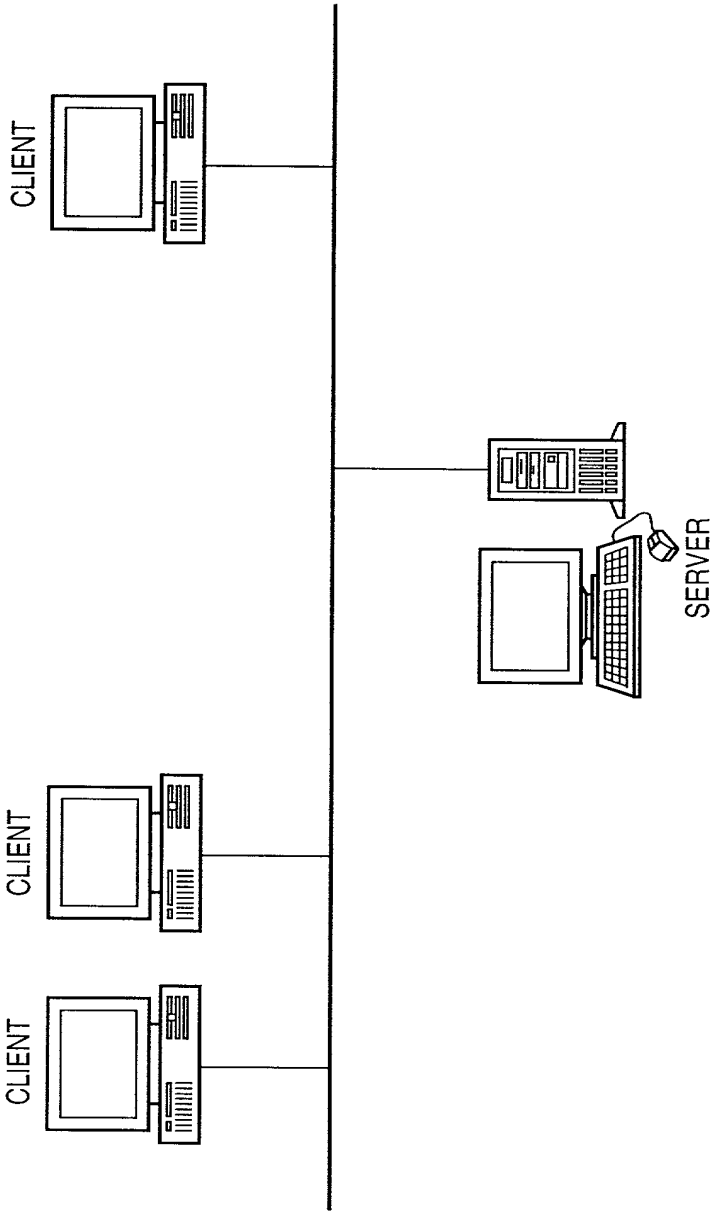


FIG. 2

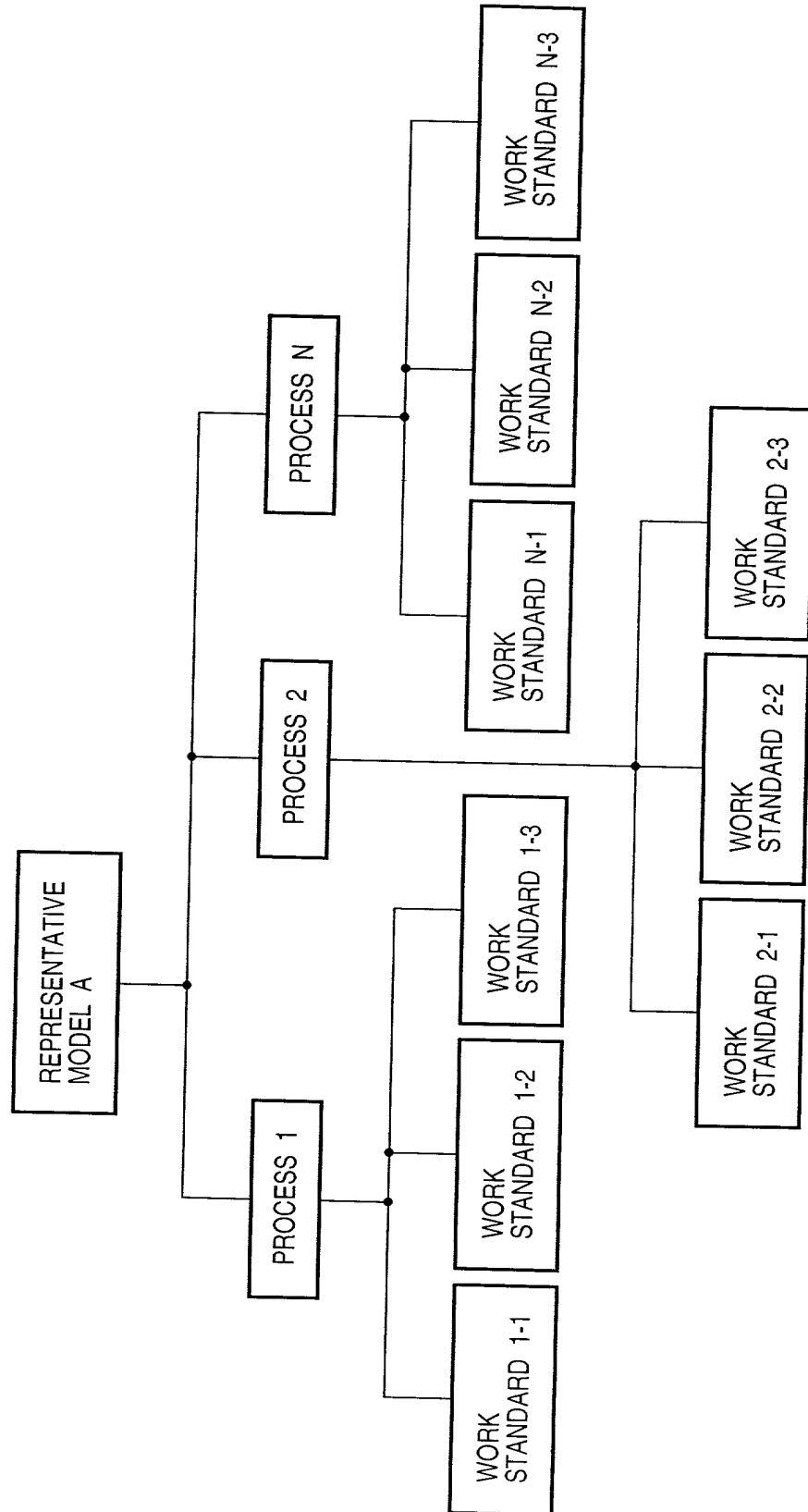


FIG. 4

STRUCTURE OF MASTER FILE

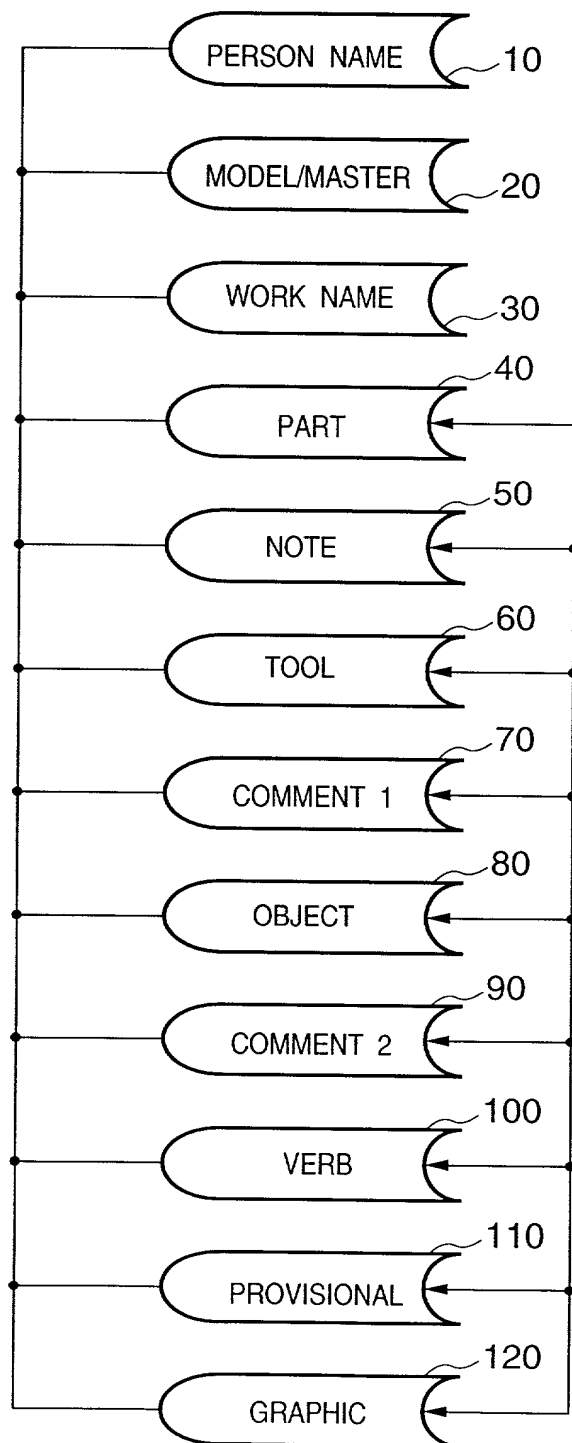


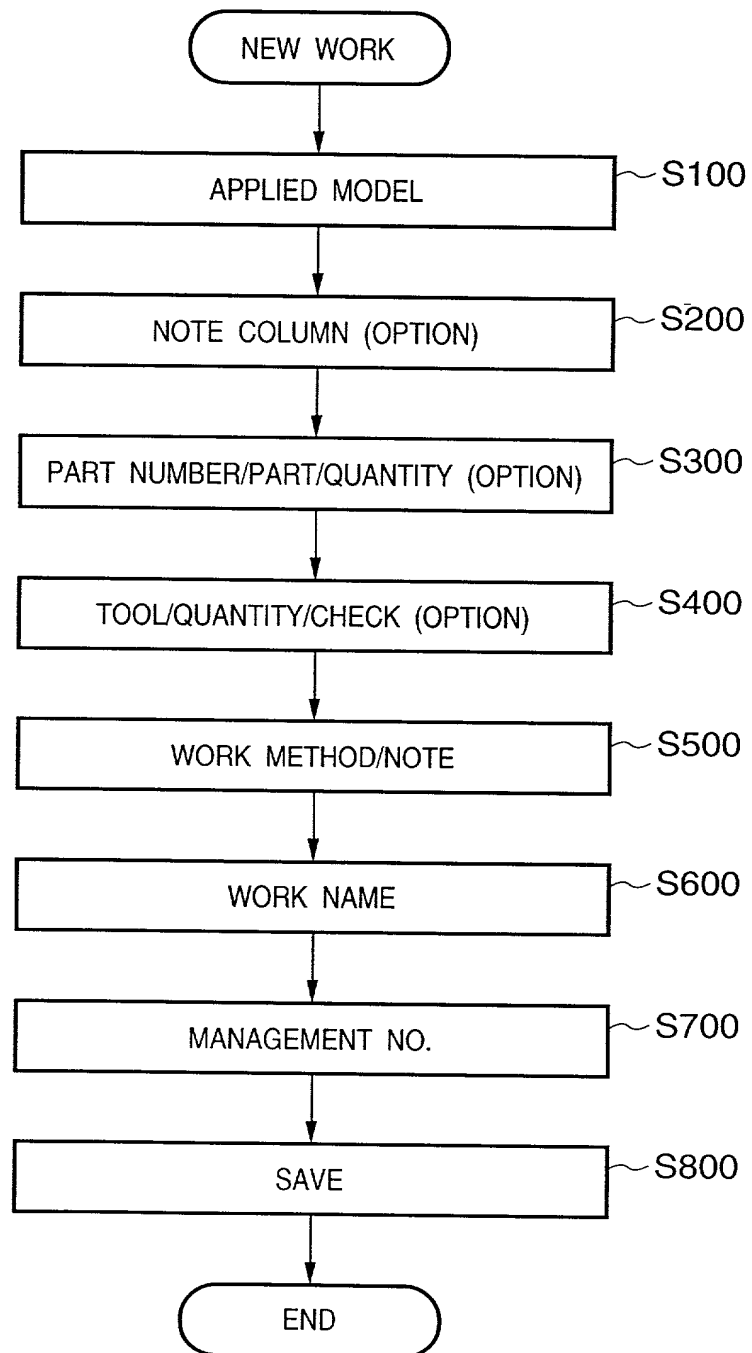
FIG. 5

FIG. 6

SELECTION OF APPLIED MODEL	
LIST OF APPLIED MODELS	
BJC-4200 SYSTEM	
BJC-420J	
BJC-420J (BLACK)	
BJC-4300	
BJC-430J	
BJC-4200LX	
A250 II Q	
BJC-4200	
OK	CANCEL

FIG. 7

WORK STANDARD 01 CREATION					
APPLIED					
BJC-420J BJC-420J(BLACK) BJC-430J					
PART NUMBER	PART NAME	QUANTITY	PART NUMBER	PART NAME	QUANTITY

302

FIG. 8

PART NUMBER	PART NAME	QUANTITY	PART NUMBER
PART			
000 - 0000 - 001	PART 001	▲	
000 - 0000 - 002	PART 002		
000 - 0000 - 003	PART 003		
001 - 0000 - 001	PART 101	▼	
001 - 0000 - 002	PART 102		
111 - 1111 - 001	PART 001		
A01 - 1234 - 001	TEST PART 0001		

FIG. 9

• WORK NAME

GE ____

• CANDIDATES

原稿(GENKO)ガラス保護紙セット(SET ORIGINAL GLASS
PROTECTIVE SHEET)

現像(GENZOU)レール戻しバネ掛け(HOOK DEVELOPING RAIL
RETURN SPRING)

現像(GENZOU)レール戻しバネ掛け(後)(HOOK DEVELOPING
RAIL RETURN SPRING(AFTER))

原稿(GENKOU)台ガラスセット(SET ORIGINAL GLASS TABLE)

原稿(GENKOU)台保護紙セット(SET ORIGINAL TABLE
PROTECTIVE SHEET)

現像機(GENZOUKI)トナーなしチェック(CHECK NO TONER IN
DEVELOPER)

現像機(GENZOUKI)エラーチェック(CHECK ERROR IN
DEVELOPER)

現像機(GENZOUKI)ロック(LOCK DEVELOPER)

FIG. 10

• WORK NAME

現像(GENZOU) ____

• CANDIDATES

現像(GENZOU)レール戻しバネ掛け(HOOK DEVELOPING
RAIL RETURN SPRING)

現像(GENZOU)レール戻しバネ掛け(後)(HOOK DEVELOPING
RAIL RETURN SPRING(AFTER))

現像機(GENZOUKI)トナーなしチェック(CHECK NO TONER
IN DEVELOPER)

現像機(GENZOUKI)エラーチェック(CHECK ERROR IN
DEVELOPER)

現像機(GENZOUKI)ロック(LOCK DEVELOPER)

FIG. 11

1100

WORK STANDARD SYSTEM

WORK NAME :

WORK METHOD :

1101 (COMMENT 1)

1102 (OBJECT) ~を

1103 (COMMENT 2)

1104 (VERB) ~する

00 ※

01

1105a

1105b

1105

NOTE, STANDARD / REQUIRED QUALITY :

1106

1107

OK CANCEL

1108

FIG. 12

WORK STANDARD SYSTEM	
WORK NAME :	
WORK METHOD :	
	1201
	1202
00 ※	1105b
01	

FIG. 13

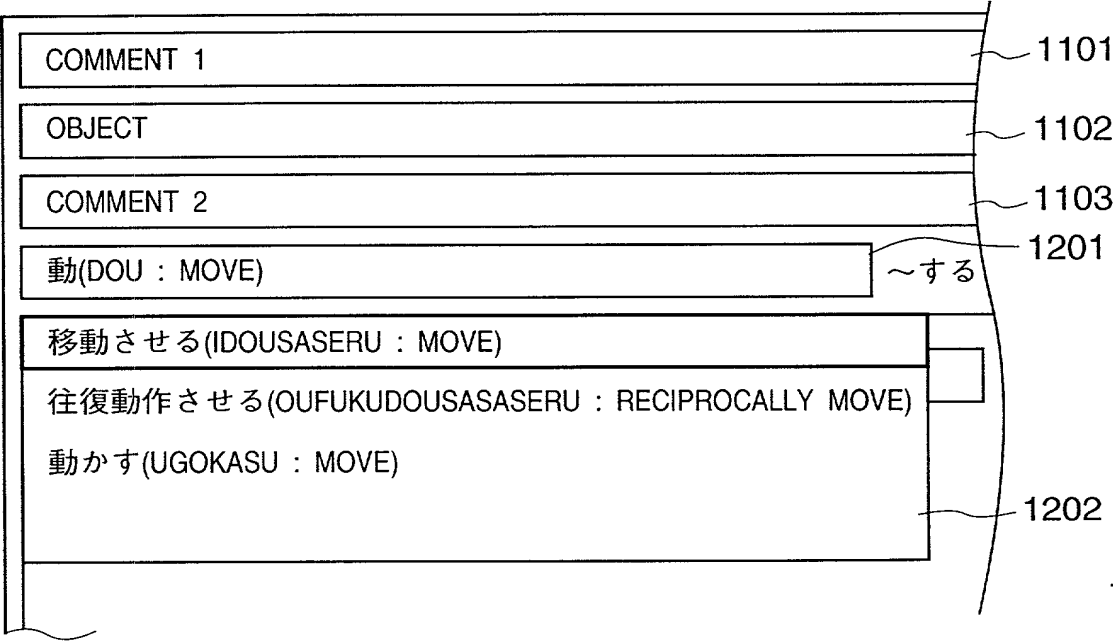


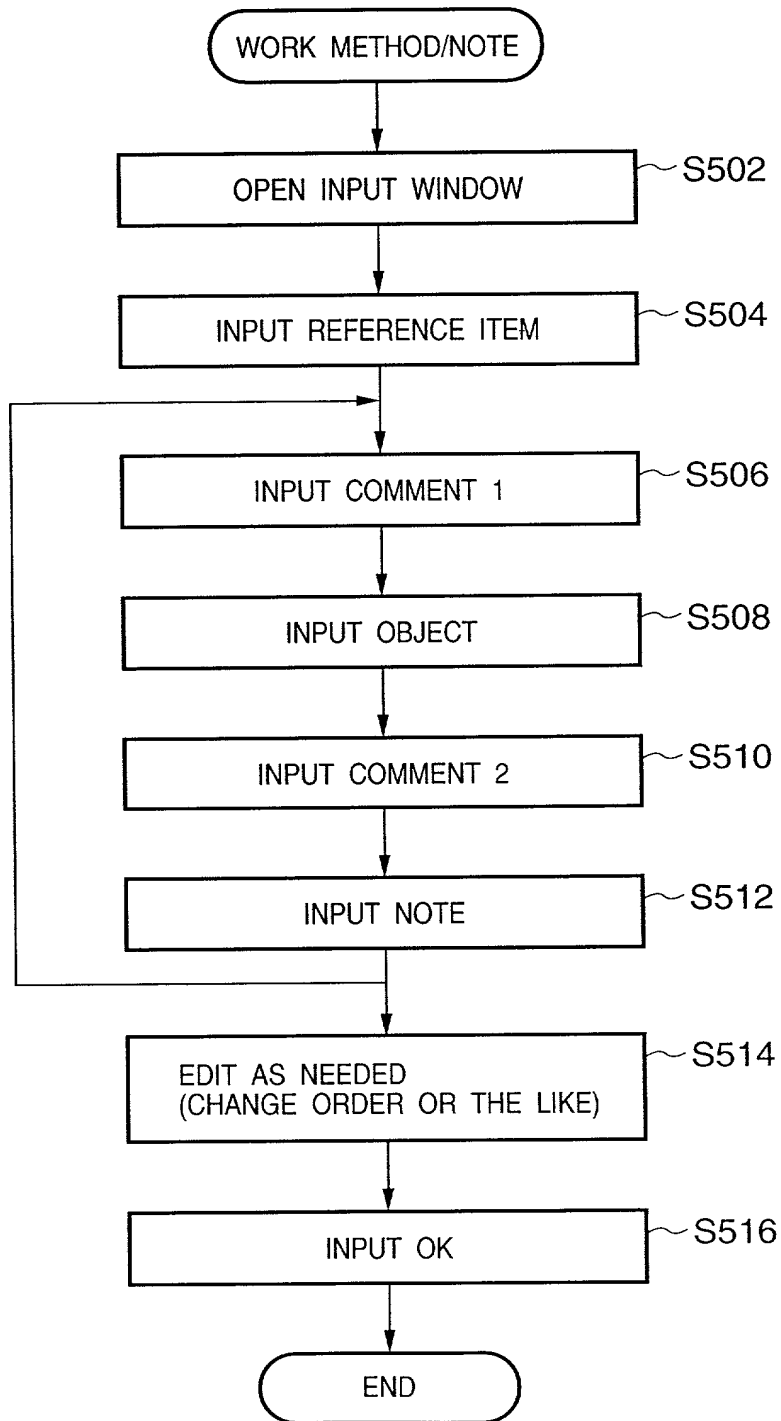
FIG. 14

FIG. 15

00	※	
01	DO zzzz SUCH THAT xxxx AT wwww POSITION BECOMES yyyy	
02	WIND AV CORD	
03	CONFIRM 100V SYSTEM	
04	SET CRG HOLDER	

FIG. 16

NOTE, STANDARD / REQUIRED QUALITY	1601
NOTE	
SEPARATION GRIPPER MOVES SLOWLY WITHOUT GRIPPER SPRING OF ASFu DON'T PULL TAPE TOO STRONG TO MAKE SIDE GUIDE LOOSE DON'T HOOK PAPER GUIDE u ON SHEET HOLDER BEWARE OF IMITATIONS BEWARE OF IMITATIONS(Color Style Write	1602

FIG. 17

NOTE, STANDARD / REQUIRED QUALITY	
1	NOTE

1107

FIG. 18

CONFIRM	
00 ※	
01 CONFIRM 100V SYSTEM	CUT(I)
02 WIND AV CORD	COPY(C)
03 SET CRG HOLDER	PASTE(P)
04	ADD(A)
	DELETE(D)
	UNDO
	REVISE(CHANGE)
	REVISE(DELETE)
NOTE, STANDARD / REQUIRED QUALITY	

1802

FIG. 19

CONFIRM	～する
00 ※	
01 WIND AV CORD	
02 CONFIRM 100V SYSTEM	
03 SET CRG HOLDER	
04	

NOTE, STANDARD / REQUIRED QUALITY

FIG. 20

CONFIRM	
00 ※	
01 WIND AV CORD	
02 SET CRG HOLDER	
03	
NOTE, STANDARD / REQUIRED QUALITY	

CUT(I)
COPY(C)
PASTE(P)
ADD(A)
DELETE(D)
UNDO
REVISE(CHANGE)
REVISE(DELETE)

1802

FIG. 21

WORK STANDARD SYSTEM	
WORK STANDARD(F)	EDIT(E) ILLUSTRATION(I) SHIPMENT DESTINATION
CREATE(N) Ctrl + N	✂ 📄 🖨 ←
OPEN(O) Ctrl + O	
CLOSE(C)	
CLOSE ALL	
SAVE(S) Ctrl + S	
SAVE REVISE(A) Ctrl + A	
SAVE ALL	PART
DELETE(D)	
DELETE FROM LIST	
PREVIEW(V)	
PRINT(P) Ctrl + P	
PRINT FROM LIST	
END(X)	

FIG. 22

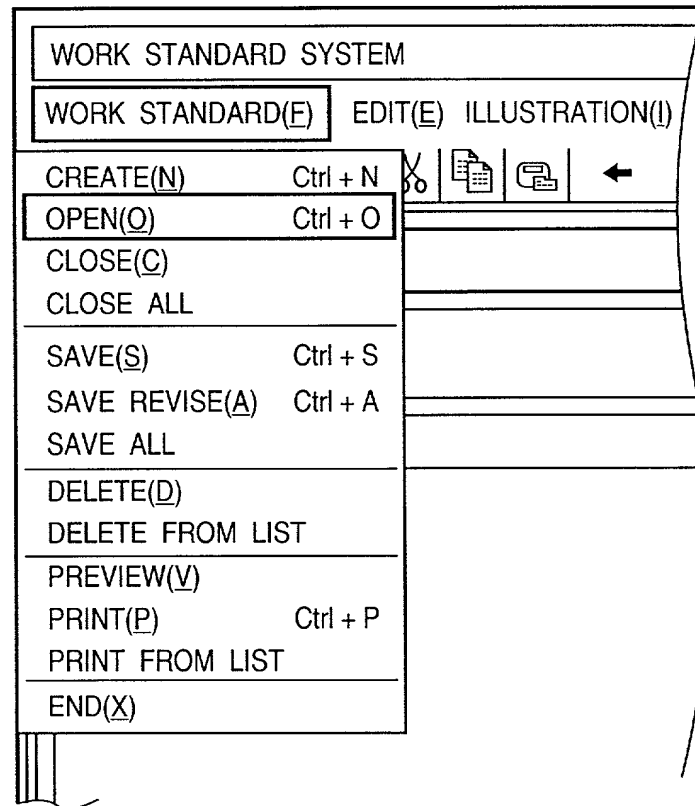


FIG. 23

WORK STANDARD SYSTEM			
<input checked="" type="radio"/> LATEST REVISION NUMBER <input type="radio"/> ALL			
MANAGEMENT NO.	REVISION NUMBER	WORK NAME	DATE OF REGISTRATION
SO - 04 - 01(4) - E	01	ASF _U 取付	1997/09/13
SO - 01 - 01(3) - E	01	ベース・トレ _U 取付	1997/09/01
SO - 01 - 03 - E	01	ベース・トレ _U 取付	1997/09/01
SO - 01 - 04 - E	01	ベース・トレ _U 取付	1997/09/01
SO - 06 - 01 - E	01	線処理	1997/09/01
SO - 06 - 02 - E	01	線処理	1997/09/01
SO - 06 - 03 - E	01	線処理	1997/09/01
SO - 07 - 01(2) - E	01	レーグルリス塗布	1997/09/01
SO - 08 - 01 - E	01	レール取付	1997/09/01

2301

FIG. 24





SYSTEM				
EDIT(E)		ILLUSTRATION(I)	SHIPMENT DESTINATION(S)	
		VIEW(V)		
01 CREATE		EDIT(E)		
		PowerPoint		
		✓ Canvas		

FIG. 25

WORK STANDARD 01 CREATION

302

APPLIED

PART NUMBER PART NAME

303

TOOL / TREATMENT DEVICE

WORK PROCEDURE

No.

FILE NAME :

2501 2502 2503 2504

2500

UPDATE CLEAR CLOSE

REVISION NUMBER CONTENTS OF REVISION DATE PERSON IN CHARGE APPROVE WORK NAME

01 CREATED 1997/09/25

MANAGEMENT NO.

FIG. 26

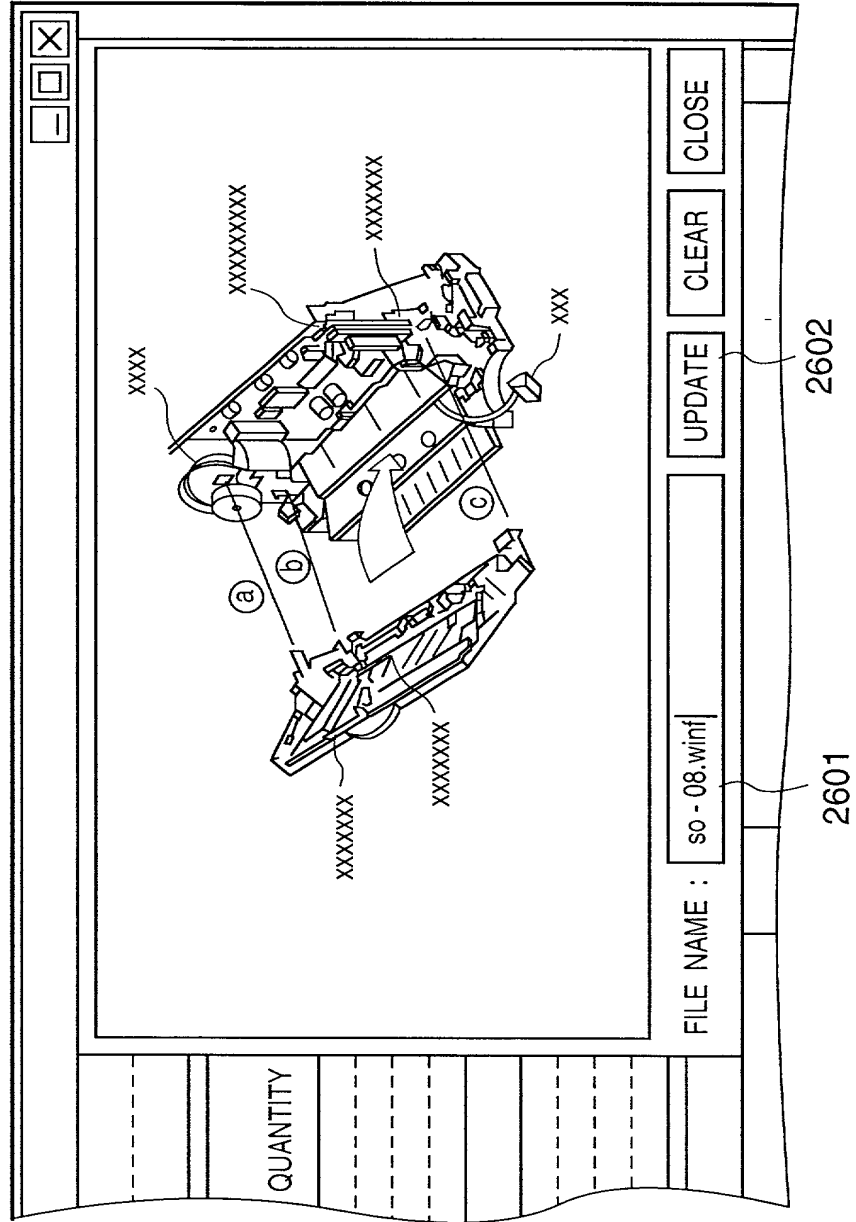


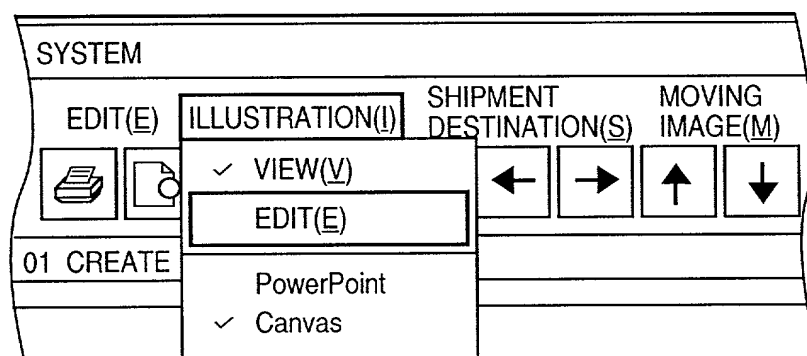
FIG. 27

FIG. 28

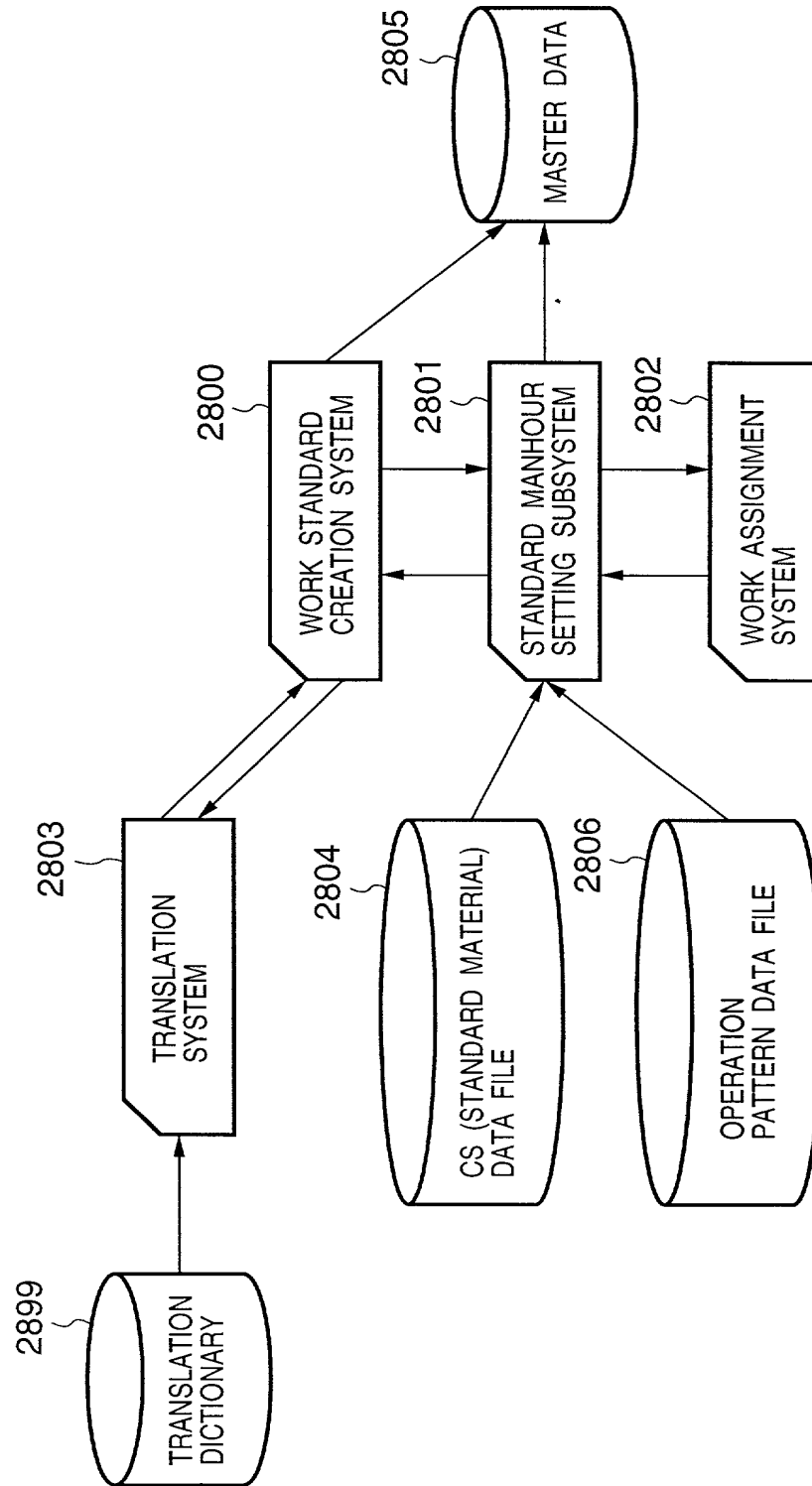


FIG. 29

WORK STANDARD : TRANSLATION SYSTEM (PROTOTYPE) [X]

☒ WORK STANDARD DATA

☐ MASTER DATA

UPLOAD WORK STANDARD

DOWNLOAD WORK STANDARD

TRANSLATE WORK STANDARD

END

FIG. 30

3001 3002 3003 3004

TRANSLATION OF WORK STANDARD

3000

REPRESENTATIVE MODEL NAME : A252

PREPUCES NAME : PLATEN UNIT

☐ TOTAL
☒ ASSEMBLY
☐ UNIT
☐ ASSEMBLY

DISPLAY DATA

☒ ALL
☐ UNTRANSLATED
☐ UNCHECKED

DISPLAY LANGUAGE

☐ JAPANESE
☒ ENGLISH

3005

3006

3007

3008

3009

3010

3011

3012

3013

3014

3015

3016

3017

3018

3019

3020

3021

3022

3023

3024

3025

3026

3027

3028

3029

3030

3031

3032

3033

3034

3035

3036

3037

3038

3039

3040

3041

3042

3043

3044

3045

3046

3047

3048

3049

3050

3051

3052

3053

3054

3055

3056

3057

3058

3059

3060

3061

3062

3063

3064

3065

3066

3067

3068

3069

3070

3071

3072

3073

3074

3075

3076

3077

3078

3079

3080

3081

3082

3083

3084

3085

3086

3087

3088

3089

3090

3091

3092

3093

3094

3095

3096

3097

3098

3099

3100

3101

3102

3103

3104

3105

3106

3107

3108

3109

3110

3111

3112

3113

3114

3115

3116

3117

3118

3119

3120

3121

3122

3123

3124

3125

3126

3127

3128

3129

3130

3131

3132

3133

3134

3135

3136

3137

3138

3139

3140

3141

3142

3143

3144

3145

3146

3147

3148

3149

3150

3151

3152

3153

3154

3155

3156

3157

3158

3159

3160

3161

3162

3163

3164

3165

3166

3167

3168

3169

3170

3171

3172

3173

3174

3175

3176

3177

3178

3179

3180

3181

3182

3183

3184

3185

3186

3187

3188

3189

3190

3191

3192

3193

3194

3195

3196

3197

3198

3199

3200

3201

3202

3203

3204

3205

3206

3207

3208

3209

3210

3211

3212

3213

3214

3215

3216

3217

3218

3219

3220

3221

3222

3223

3224

3225

3226

3227

3228

3229

3230

3231

3232

3233

3234

3235

3236

3237

3238

3239

3240

3241

3242

3243

3244

3245

3246

3247

3248

3249

3250

3251

3252

3253

3254

3255

3256

3257

3258

3259

3260

3261

3262

3263

3264

3265

3266

3267

3268

3269

3270

3271

3272

3273

3274

3275

3276

3277

3278

3279

3280

3281

3282

3283

3284

3285

3286

3287

3288

3289

3290

3291

3292

3293

3294

3295

3296

3297

3298

3299

3300

3301

3302

3303

3304

3305

3306

3307

3308

3309

3310

3311

3312

3313

3314

3315

3316

3317

3318

3319

3320

3321

3322

3323

3324

3325

3326

3327

3328

3329

3330

3331

3332

3333

3334

3335

3336

3337

3338

3339

3340

3341

3342

3343

3344

3345

3346

3347

3348

3349

3350

3351

3352

3353

3354

3355

3356

3357

3358

3359

3360

3361

3362

3363

3364

3365

3366

3367

3368

3369

3370

3371

3372

3373

3374

3375

3376

3377

3378

3379

3380

3381

3382

3383

3384

3385

3386

3387

3388

3389

3390

3391

3392

3393

3394

3395

3396

3397

3398

3399

3400

3401

3402

3403

3404

3405

3406

3407

3408

3409

3410

3411

3412

3413

3414

3415

3416

3417

3418

3419

3420

3421

3422

3423

3424

3425

3426

3427

3428

3429

3430

3431

3432

3433

3434

3435

3436

3437

3438

3439

3440

3441

3442

3443

3444

3445

3446

3447

3448

3449

3450

3451

3452

3453

3454

3455

3456

3457

3458

3459

3460

3461

3462

3463

3464

3465

3466

3467

3468

3469

3470

3471

3472

3473

3474

3475

3476

3477

3478

3479

3480

3481

3482

3483

3484

3485

3486

3487

3488

3489

3490

3491

3492

3493

3494

3495

3496

3497

3498

3499

3500

3501

3502

3503

3504

3505

3506

3507

3508

3509

3510

3511

3512

3513

3514

3515

3516

3517

3518

3519

3520

3521

3522

3523

3524

3525

3526

3527

3528

3529

3530

3531

3532

3533

3534

3535

3536

3537

3538

3539

3540

3541

3542

3543

3544

3545

3546

3547

3548

3549

3550

3551

3552

3553

3554

3555

3556

3557

3558

3559

3560

3561

3562

3563

3564

3565

3566

3567

3568

3569

3570

3571

3572

3573

3574

3575

3576

3577

3578

3579

3580

3581

3582

3583

3584

3585

3586

3587

3588

3589

3590

3591

3592

3593

3594

3595

3596

3597

3598

3599

3600

3601

3602

3603

3604

3605

3606

3607

3608

3609

3610

3611

3612

3613

3614

3615

3616

3617

3618

3619

3620

3621

3622

3623

3624

3625

3626

3627

3628

3629

3630

3631

3632

3633

3634

3635

3636

3637

3638

3639

3640

3641

3642

3643

3644

3645

3646

3647

3648

3649

3650

3651

3652

3653

3654

3655

3656

3657

3658

3659

3660

3661

3662

3663

3664

3665

3666

3667

3668

3669

3670

3671

3672

3673

3674

3675

3676

3677

3678

3679

3680

3681

3682

3683

3684

3685

3686

3687

3688

3689

3690

3691

3692

3693

3694

3695

3696

3697

3698

3699

3700

3701

3702

3703

3704

3705

3706

3707

3708

3709

3710

3711

3712

3713

3714

3715

3716

3717

3718

3719

3720

3721

3722

3723

3724

3725

3726

3727

3728

3729

3730

3731

3732

3733

3734

3735

3736

3737

3738

3739

3740

3741

3742

3743

3744

3745

3746

3747

3748

3749

3750

3751

3752

3753

3754

3755

3756

3757

3758

3759

3760

3761

3762

3763

3764

3765

3766

3767

3768

3769

3770

3771

3772

3773

3774

3775

3776

3777

3778

3779

3780

3781

3782

3783

3784

3785

3786

3787

3788

3789

3790

3791

3792

3793

3794

3795

3796

3797

3798

3799

3800

3801

3802

3803

3804

3805

3806

3807

3808

3809

3810

3811

3812

3813

3814

3815

3816

3817

3818

3819

3820

3821

3822

3823

3824

3825

3826

3827

3828

3829

3830

3831

3832

3833

3834

3835

3836

3837

3838

3839

3840

3841

3842

3843

3844

3845

3846

3847

3848

3849

3850

3851

3852

3853

3854

3855

3856

3857

3858

3859

3860

3861

3862

3863

3864

3865

3866

3867

3868

3869

3870

3871

3872

3873

3874

3875

3876

3877

3878

3879

3880

3881

3882

3883

3884

3885

3886

3887

3888

3889

3890

3891

3892

3893

3894

3895

3896

3897

3898

3899

3900

3901

3902

3903

3904

3905

3906

3907

3908

3909

3910

3911

3912

3913

3914

3915

3916

3917

3918

3919

3920

3921

3922

3923

3924

3925

3926

3927

3928

3929

3930

3931

3932

3933

3934

3935

3936

3937

3938

3939

3940

3941

3942

3943

3944

3945

3946

3947

3948

3949

3950

3951

3952

3953

3954

3955

3956

3957

3958

3959

3960

3961

3962

3963

3964

3965

3966

3967

3968

3969

3970

3971

3972

3973

3974

3975

3976

3977

3978

3979

3980

3981

3982

3983

3984

3985

3986

3987

3988

3989

3990

3991

3992

3993

3994

3995

3996

3997

3998

3999

4000

4001

4002

4003

4004

4005

4006

4007

4008

4009

4010

4011

4012

4013

4014

4015

4016

4017

4018

4019

4020

4021

4022

4023

4024

4025

4026

4027

4028

4029

4030

4031

4032

4033

4034

4035

4036

4037

4038

4039

4040

4041

4042

4043

4044

4045

4046

4047

4048

4049

4050

4051

4052

4053

4054

4055

4056

4057

4058

4059

4060

4061

4062

4063

4064

4065

4066

4067

4068

4069

4070

4071

4072

4073

4074

4075

4076

4077

4078

4079

4080

4081

4082

4083

4084

4085

4086

4087

4088

4089

4090

4091

4092

4093

4094

4095

4096

4097

4098

4099

4100

4101

4102

4103

4104

4105

4106

4107

4108

4109

4110

4111

4112

4113

4114

4115

4116

4117

4118

4119

4120

4121

4122

4123

4124

4125

4126

4127

4128

4129

4130

4131

4132

4133

4134

4135

4136

4137

4138

4139

4140

4141

4142

4143

4144

4145

4146

4147

4148

4149

4150

4151

4152

4153

4154

4155

4156

4157

4158

4159

4160

4161

4162

4163

4164

4165

4166

4167

4168

4169

4170

4171

4172

4173

4174

4175

4176

4177

4178

4179

4180

4181

4182

4183

4184

4185

4186

4187

4188

4189

4190

4191

4192

4193

4194

4195

4196

4197

4198

4199

4200

4201

4202

4203

4204

4205

4206

4207

4208

4209

4210

4211

4212

4213

4214

4215

4216

4217

4218

4219

4220

4221

4222

4223

4224

4225

4226

4227

4228

4229

4230

4231

4232

4233

4234

4235

4236

4237

4238

4239

4240

4241

4242

4243

4244

4245

4246

4247

4248

4249

4250

4251

4252

4253

4254

4255

4256

4257

4258

4259

4260

4261

4262

4263

4264

4265

4266

4267

4268

4269

4270

4271

4272

4273

4274

4275

4276

4277

4278

4279

4280

4281

4282

4283

4284

4285

4286

4287

4288

4289

4290

4291

4292

4293

4294

4295

4296

4297

4298

4299

4300

4301

4302

4303

4304

4305

4306

4307

4308

4309

4310

4311

4312

4313

4314

4315

4316

4317

4318

4319

4320

4321

4322

4323

4324

4325

4326

4327

4328

4329

4330

4331

4332

4333

4334

4335

4336

4337

4338

4339

4340

4341

4342

4343

4344

4345

4346

4347

4348

3101

[illegible]

FIG. 32

X

WORK PROCEDURE

VOICE(W)

JAPANESE

WORK PROCEDURE

ブレードレバネをブレードレバ-の ① 部に引っ掛ける

01 ブレードレバ-ハネをブレードレバ-の ① 部に引っ掛ける

02 ブレードレバ-を矢印 ② 方向にスライドさせ引っ掛かり無くハネ力で戻ることを確認する

03 ブレードレバ-軸先端がブレードリタ-先端まで圧入されていることを確認する

ENGLISH

Procedure

The blade lever spring hooks to ① of the blade lever.

01 The blade lever spring hooks to ① of the blade lever.

02 Side the blade lever in the direction of arrow ② and there is no catch and n....

03 Check press-fitting the blade lever shaft leading edge to the braid folder leading ed....

▲

▼

TRANSLATE

OK

CANCEL

3200

3201

3202

3203

3204

FIG. 34

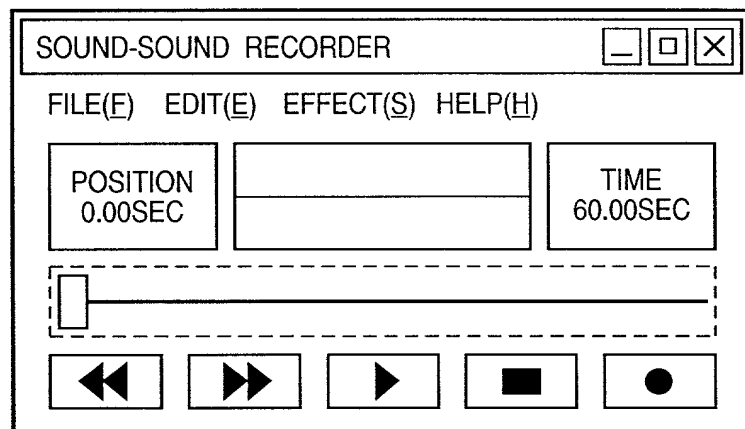


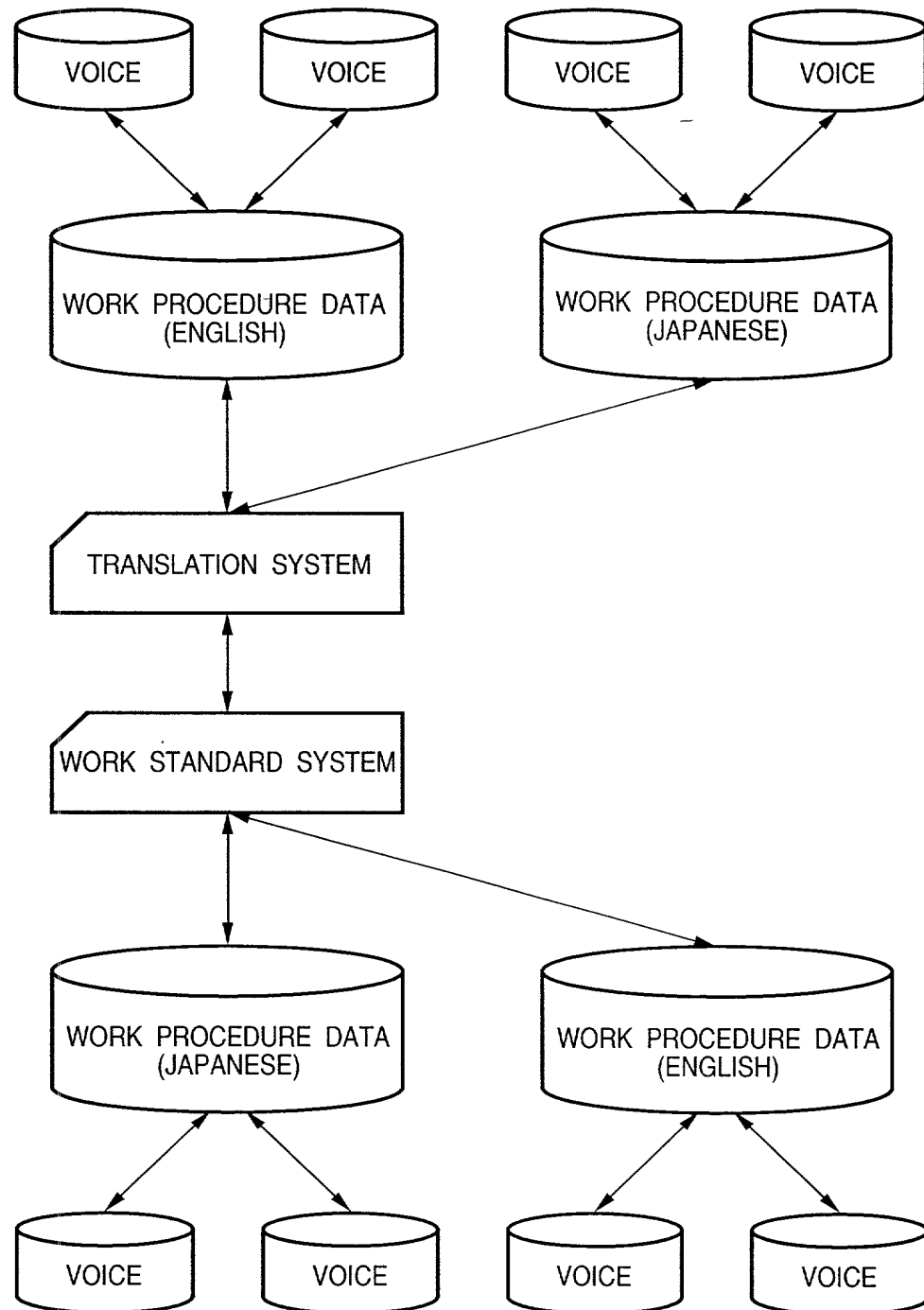
FIG. 35

FIG. 36

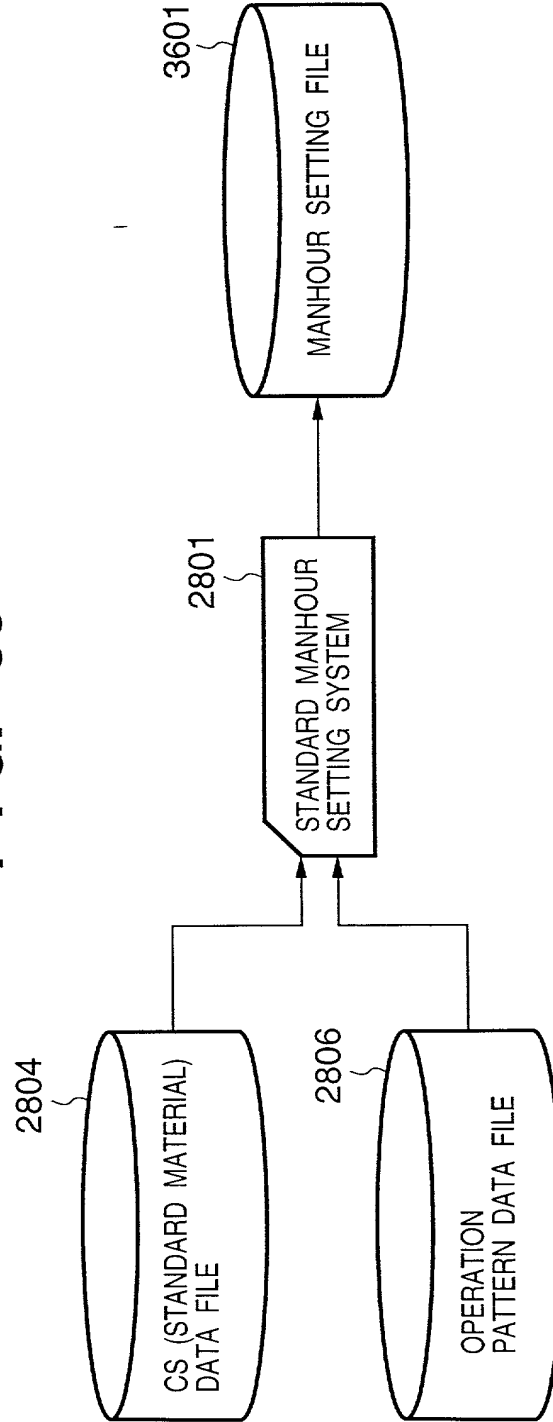


FIG. 37

No.	ELEMENT WORK NAME	FREQUENCY	MANHOUR	CS	SET CONDITION

FIG. 38

STANDARD MATERIAL DATA

COMMENT 1	OBJECT	COMMENT 2	VERB	SET CONDITION DATA

FIG. 39

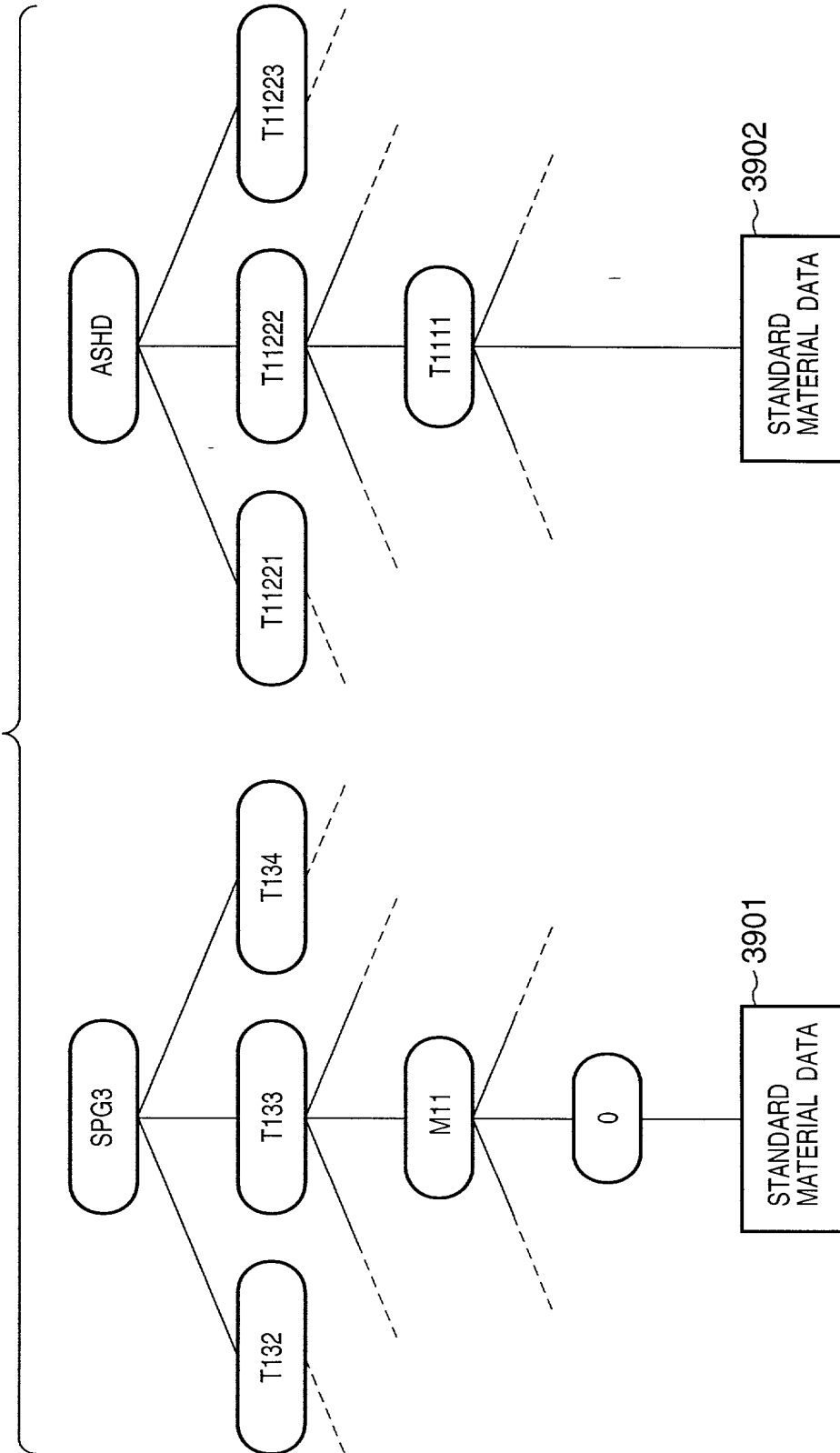


FIG. 40

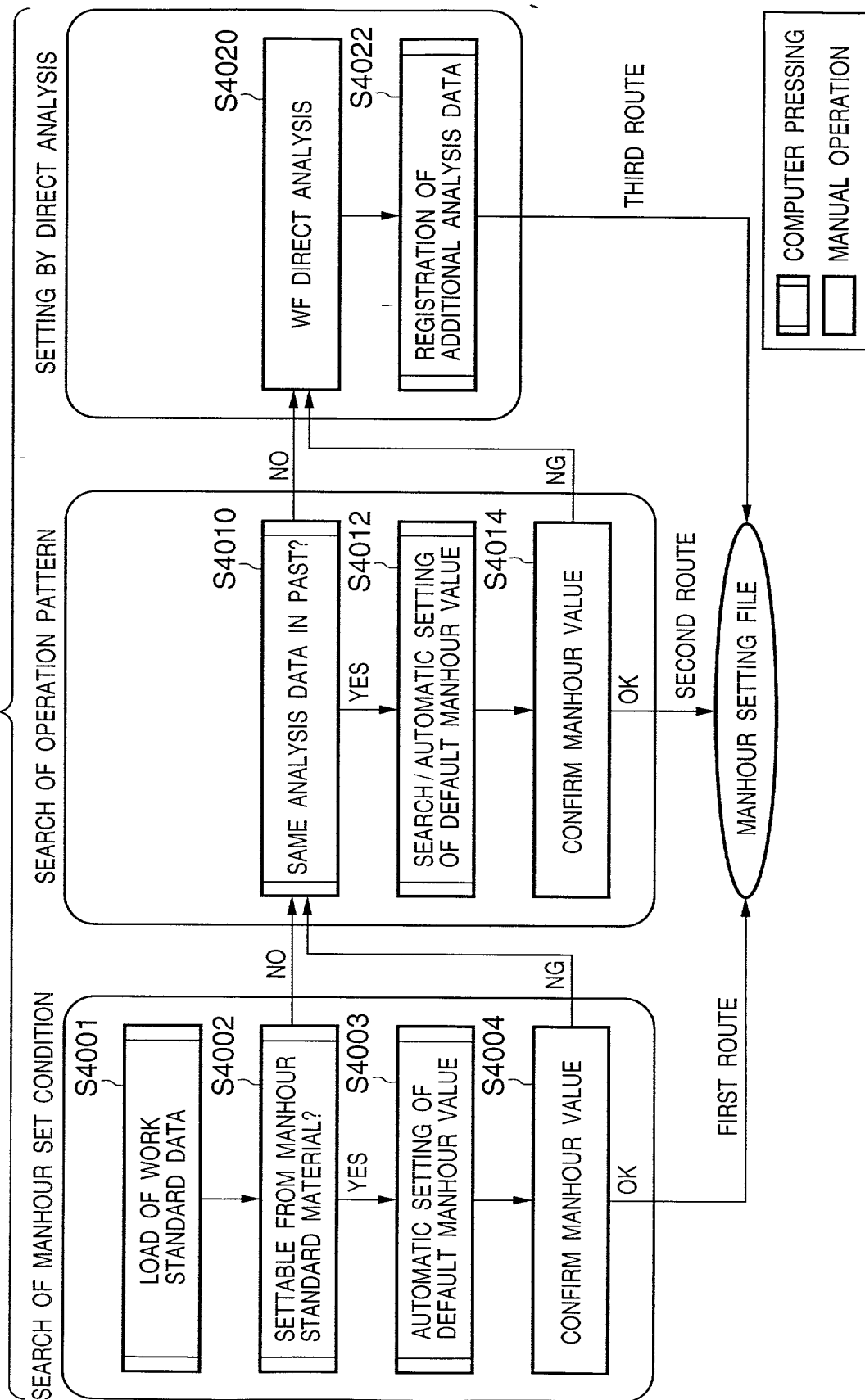
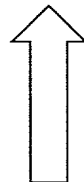


FIG. 41

3601

EDITING OF ELEMENT WORK						
FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)						
UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT						
No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	負荷バネを負荷バネ取付治具に組込む (SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1			
2	治具のSWをONにする (TURN ON SW OF TREATMENT DEVICE)	1	1			
3	分離ロー軸を負荷バネ取付治具に取込む (SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1			
4	治具のSWをOFFにする (TURN OFF SW OF TREATMENT DEVICE)	1	1			
5	分離ロー軸を治具より外す (DETACH SEPARATION ROLLER SHAFT FROM TREATMENT DEVICE)	1	1			



DATA LOAD

● ELEMENT WORK NAME

No.	COMMENT 1	OBJECT	COMMENT 2	VERB
1		負荷バネを	負荷バネ取付治具に	組込む
2	治具の	SWを		ONする
3		分離ロー軸を	負荷バネ取付治具に	組込む
4	治具の	SWを		OFFにする
5		分離ロー軸を	治具より	外す

FIG. 42

3601

EDITING OF ELEMENT WORK						
FILE(F) EDIT(E) VIEW(V) ANALYZE(A) ANALYSIS MATERIAL(B) CS(S) END(X)						
UNIT WORK NAME : SEPARATION ROLLER ATTACHMENT						
No.	ELEMENT WORK NAME	FREQUENCY		MANHOUR	CS	SET CONDITION
1	負荷バネを負荷バネ取付治具に組込む (SET LOAD SPRING IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	41	SPG3	T133 / M11 / 0
2	治具のSWをONにする (TURN ON SW OF TREATMENT DEVICE)	1	1	8		
3	分離ロー軸を負荷バネ取付治具に取込む (SET SEPARATION ROLLER SHAFT IN TREATMENT DEVICE FOR ATTACHING LOAD SPRING)	1	1	37	ASHD	T11222 / T1111
4	治具のSWをOFFにする (TURN OFF SW OF TREATMENT DEVICE)	1	1	8		
5	分離ロー軸を治具より外す (DETACH SEPARATION ROLLER SHAFT FROM TREATMENT DEVICE)	1	1	16	PUMB	T2111 / T111111


MATCH

SEARCH KEYWORD(KW)

No.	COMMENT 1	OBJECT	COMMENT 2	VERB	MANHOUR STANDARD MATERIAL	TIME VALUE
1	*	*バネを	*に	組込む	SPG3 T133 / M11 / 0	41RU
2	*	*を	*に	組込む	ASHED T11222 / T1111	37RU
3	*	*を	*より	外す	PUMQ T2111 / T111111	16RU
4	*	*リングを	*	組込む	RIN2 T11211 / SO	76RU
5	*	*コネクタを	*	差し込む	CONN T11211 / SO	41RU
6	*	*	*	増し締めする	SCR6 M211 / 1	23RU

2804

↘ MATCH

2806 

3601

[illegible]

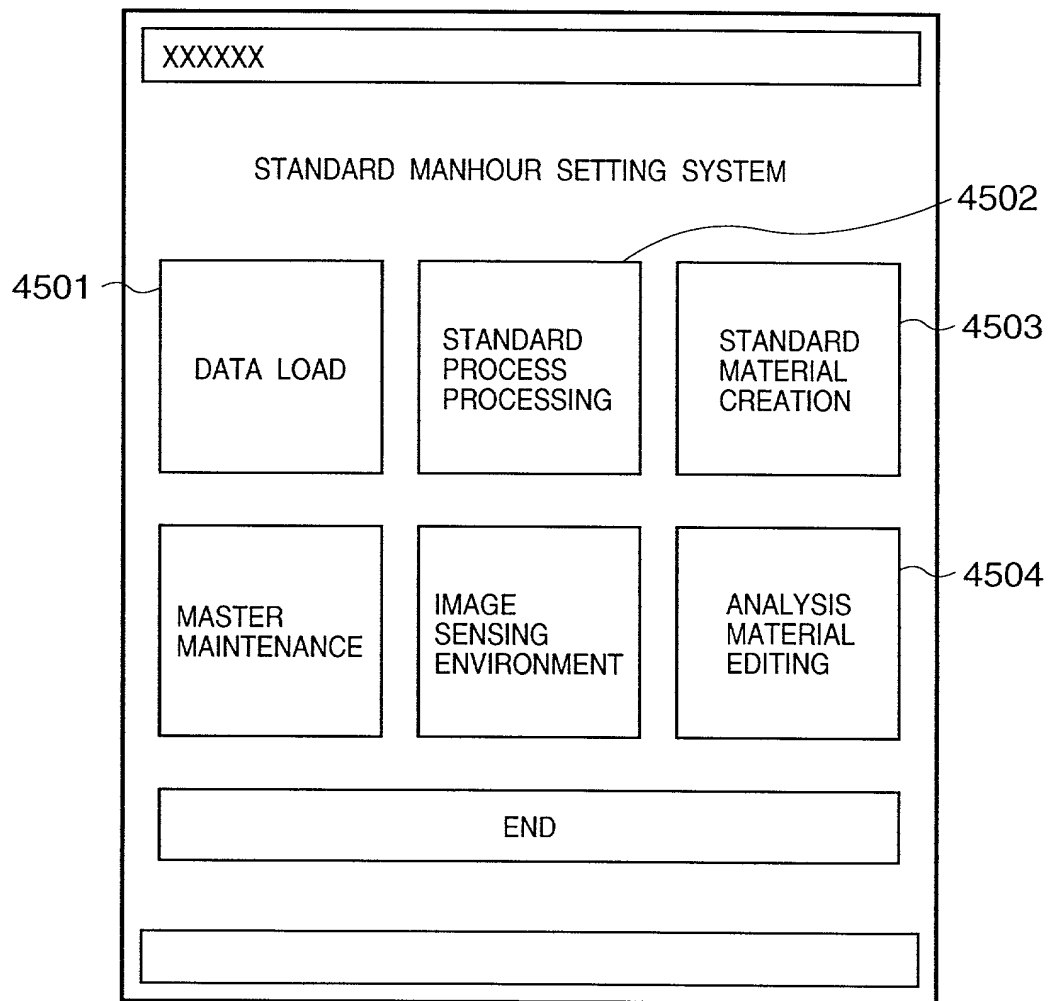
FIG. 45

FIG. 46

XXXXXXX 4609 4610

☒ ALL ☐ DESIGNATE : 1 4612

PRODUCT NUMBER : OK

NAME :

PRODUCT NUMBER	WORK STANDARD	PRODUCT SYMBOL	NAME	PREVIOUS LOAD DATE
0 - CLOCK	XXXX	XX	XXXX	XXX
XXXXXX		BL - OLD	SET IN 1996	
xyz - test				
test - 01				
tesr - AMI				

4601

SELECT 4611

CANCEL 4605

[illegible]

Journal of the American Medical Association

FIG. 48

4805 4804

LOAD OF DATA

4800

COMPONENT DESIGNATION

4801

☐ ALL

☒ DESIGNATE COMPONENT

4802

CH

AUTOMATIC MANHOURLY SETTING

☒ STANDARD MATERIAL(CS)

☒ ANALYSIS MATERIAL

4803

EXECUTE

CANCEL

4806

FIG. 49

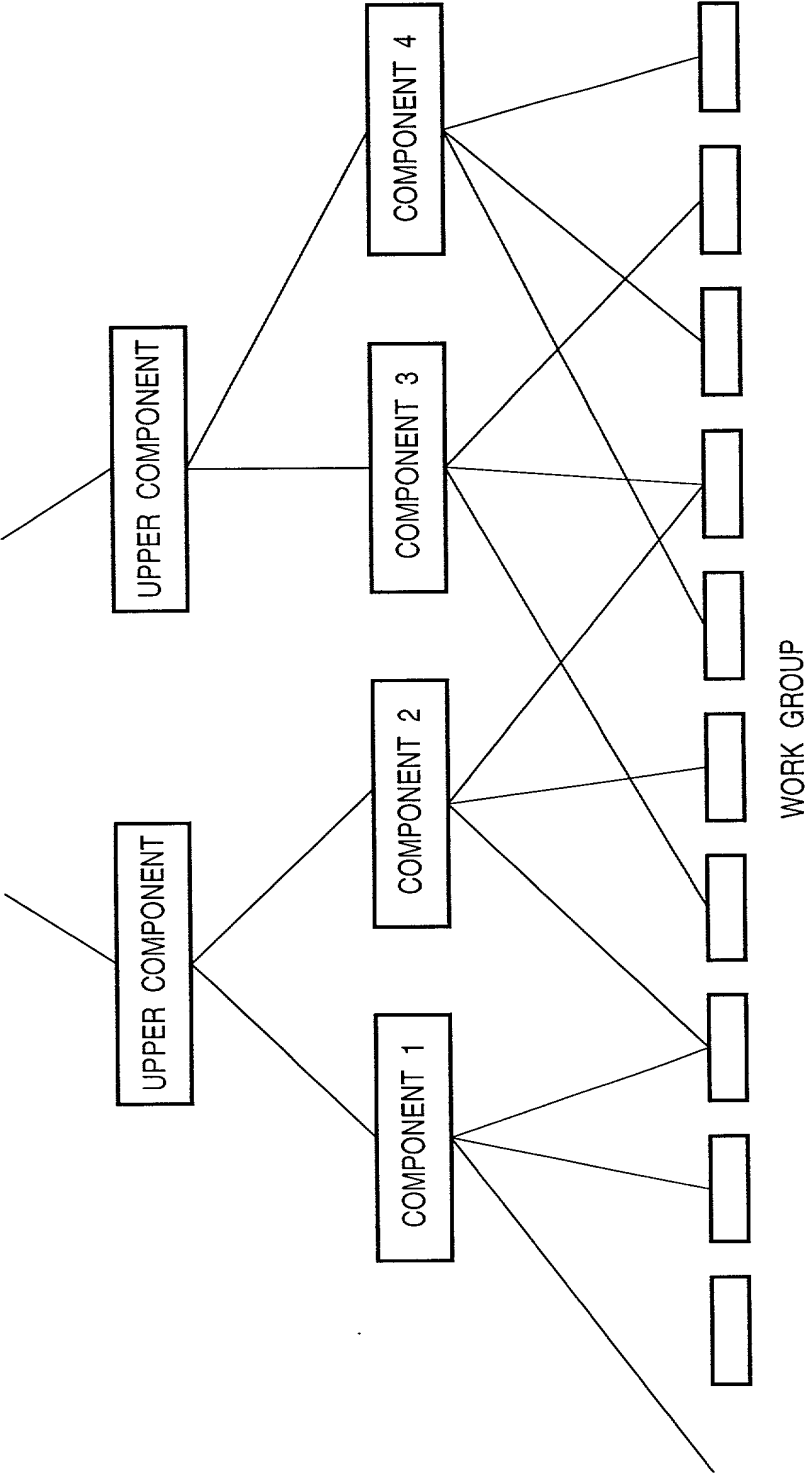


FIG. 50

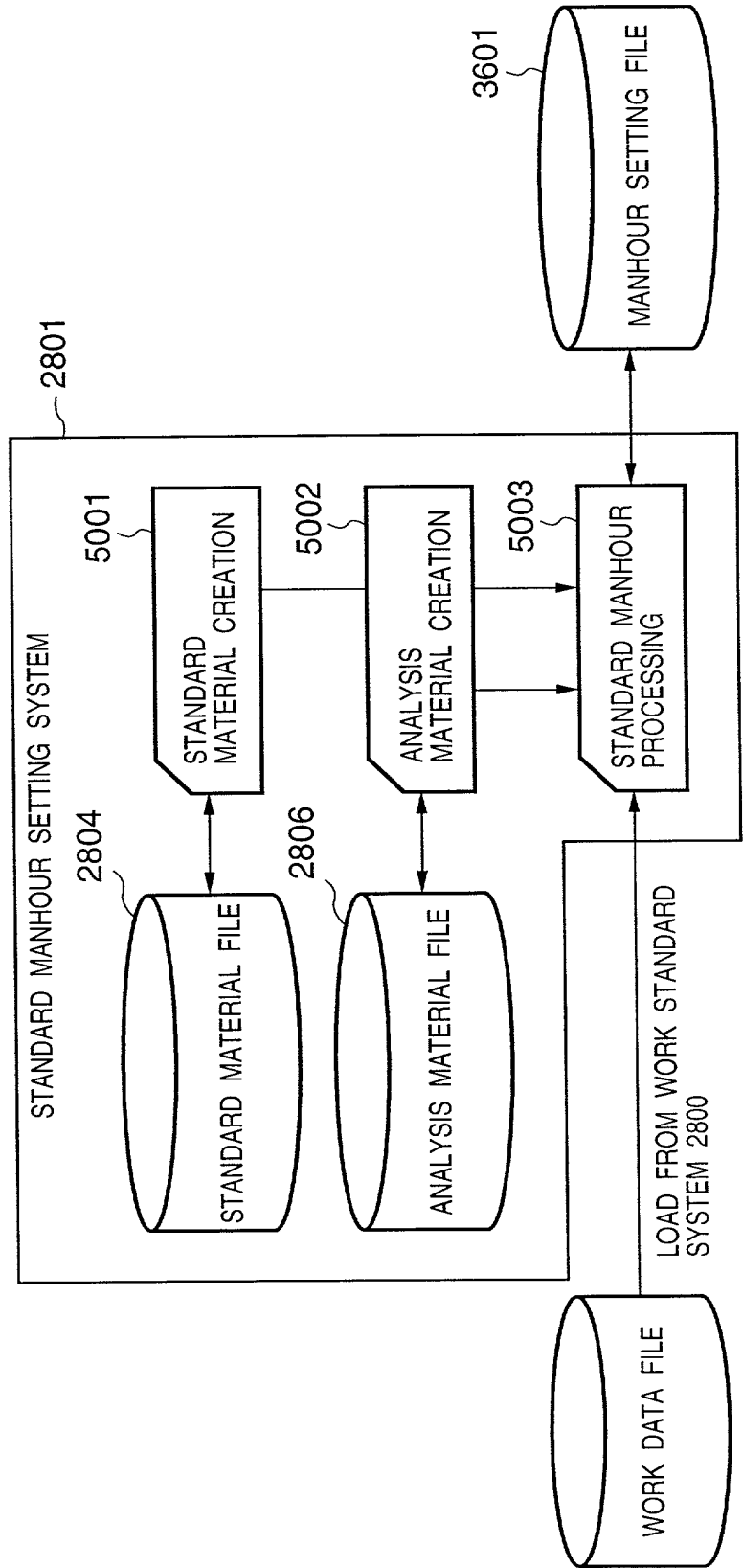
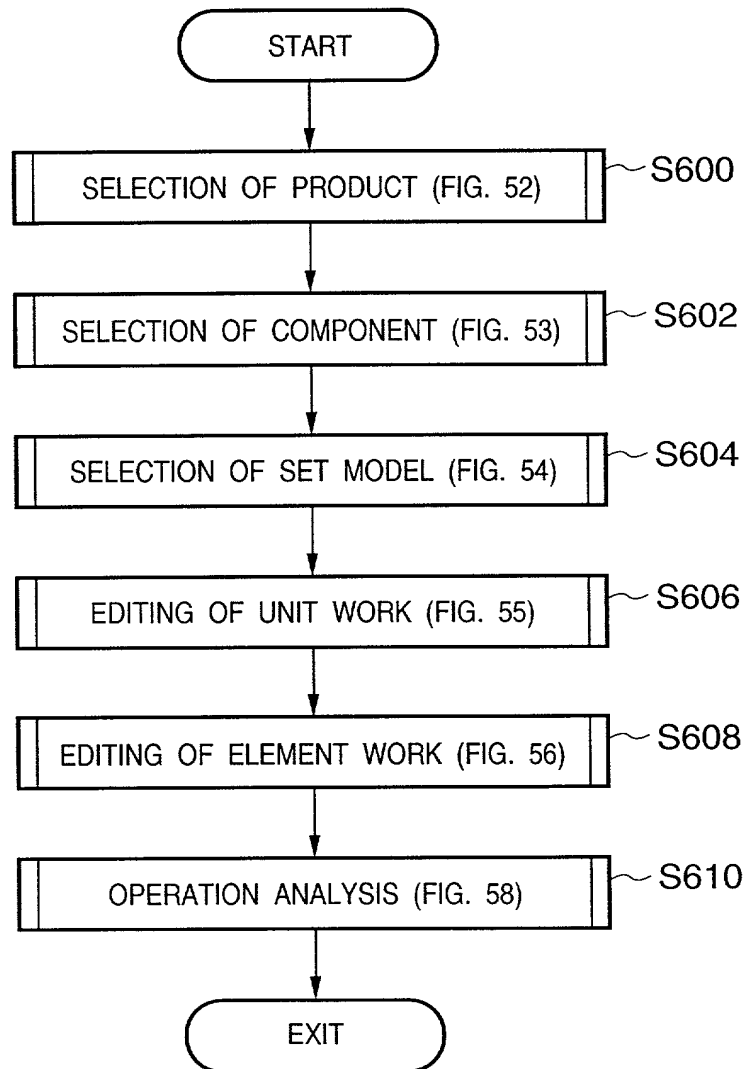


FIG. 51

2007

5201

[illegible][illegible]

FIG. 54

SELECTION OF MODEL

FILE(F) EDIT(E) VIEW(V)

PRODUCT NUMBER : BJ-970909 NAME : 97-09-09 LOAD
 COMPONENT SYMBOL : CH NAME :

SET MODEL SYMBOL	QUANTITY	NAME	PREVIOUS PUBLICATION DATE
▲ A250 IIQ			
BJC-4200LX			
BJC-4200 SYSTEM			
BJC-420J			
BJC-420J(BLACK)			
BJC-4300		XXXXXX	1997/09/09 10:46:33
BJC-430J			

NEXT REGISTER PUBLICATION LOOK PUBLICATION DISPLAY SAME MODEL END



PRODUCT SYMBOL : B.I - 970909 NAME : 097 - 09 - 09 LOAD SET MODEL SYMBOL : BJC - 4300

COMPONENT SYMBOL :	ON	NAME :	NAME : xxxxxx
--------------------	----	--------	---------------

	S		FORMAL MANAGEMENT NO.	REVISION	UNIT WORK NAME	MANHOUR	USE	CS	FREQUENCY
▲	N ⁱ	3	CH-01-01	1	電気チェック	0	0	0	1
	N ⁱ	4	CH-01-02(1)	1	電気チェック	0	0	0	1
	N ⁱ	5	CH-01-02(2)	1	電気チェック	0	0	0	1
	N ⁱ	6	CH-01-03	1	電気チェック	0	0	0	1
	N ⁱ	7	CH-01-04	1	電気チェック	0	0	0	1

Ni	23	CH-07-02(1)	1	フロントカバ—u取付	0	0	0	0	1
Ni	24	CH-07-02(2)	1	フロントカバ—u取付	0	0	0	0	1
Ni	25	CH-07-01(3)	1	フロントカバ—u取付	0	0	0	0	1
Ni	26	CH-07-01(4)	1	フロントカバ—u取付	0	0	0	0	1

[illegible]

3	CH-01-01	ELECTRICAL CHECK	0	0	1
---	----------	------------------	---	---	---

☒ CHANGE ☐ INSERT ☐ ADD

OK

5501 5507 5506 5502 5503 5504 5505

FIG. 57

EDITING OF ANALYSIS MATERIAL

FILE(E) EDIT(E) VIEW(V)

PRODUCT GENRE :

ALL

TYPE	COMMENT 1	OBJECT	COMMENT 2	VERB	ANALYSIS SYMBOL	MAN- HOUR	USE	FREQUENCY	COUNT	SET DATE
▶	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	1	97/09/09 9:52
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/E/02N/-6	11	0	1	1	97/09/09 9:53
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	1	97/09/09 9:55
		要素作業01		動詞	-50/Gr1/N/>6/-3	15	0	1	1	97/09/10 16:34
	I7-キャップ:	本体を	矢印1の様に	入れる	-50/Gr1/N/>6/-3	15	0	1	1	97/09/10 19:09
		キャリッジロック		塗布する	Time100/Rate100	100	100	1	1	97/09/10 19:16
	モーター組立:	フリンダジャー		入れ、セットする	M211/1/10	50	1	1	1	97/09/11 17:00
		フリンダジャー		裏面にする	T1221/M2311/0/0	12	0	1	1	97/09/11 17:34
		1		1	T2221/M1211/0/1	24	0	1	1	97/09/11 17:20
		2		2	T1221/M2311/0/0	12	0	1	1	97/09/11 17:24
		フリンダジャー	PRカイト取得	セットする		15	0	1	1	97/09/12 11:24
		dgdafdfas		fdasfdasfastad	*	16	0	1	1	97/09/12 12:10
		dsdsfisdasaf		fdasfdadfdas	T21121/M1111/0/1	13	0	1	1	97/09/12 12:10
		dgdafdfas		fdasfdasfastad	*	16	0	1	1	97/09/12 13:39
		フリンダジャー	PRカイト取得	セットする		15	0	1	1	97/09/12 14:00
		フリンダジャー	PRカイト取得	セットする		15	0	1	1	97/09/12 14:00
		フリンダジャー		セットする	Time100/Rate100	100	100	1	1	97/09/12 14:04

FIG. 58

5801 5802 5803 5804 5805

OPERATION ANALYSIS						
1 SET MAIN BODY TO PREDETERMINED POSITION						
TOTAL SIMO VALUE : 0						
TOTAL MANHOUR VALUE : 15						
NEXT ELEMENT WORK						
NO.	CONTENTS OF OPERATION	WF/OS	SET CONDITION	MANHOUR	USE	REMARKS
1	XXXXXX	PU	-60/Gr1/N/>6/-3	15	0	
*						

FIG. 59

5901

☐ 1. PU

☐ 2. GET

☐ 3. M

☐ 4. MA

☐ 5. ASY

☐ 6. DSY

☐ 7. R

☐ 8. UMAC

☐ 9. MP

☐ 10. BODY

☐ 11. PU

☐ 12. GET

☐ 13. M

☐ 14. MA

☐ 15. ASY

☐ 16. DSY

☐ 17. R

☐ SIMO

SELECT

CANCEL

5902

FIG. 60

XXXXXXX					
PU		PICK UP		MANUAL	
1 :	MOVING DISTANCE	-10cm	+10cm	>50cm	6
2 :	GRIP TYPE	Qr-3	Qr-2		
3 :	PRE-POSITIONING	NO	YES		
4 :	MAIN SIZE	-10mm	-6mm		
5 :	WEIGHT	<3Kg	>3Kg		
6 :					

SET	CANCEL	SET VALUE	FORMULA
6001		6002	6003

FIG. 61

FORMULA

TURN CHANGE DIRECTION OF BODY MANUAL

FORMULA : 10 * m

VARIABLE	VARIABLE NAME	VALUE	UNIT
m :	THE NUMBER OF TIMES OF OPERATION OF CHANGING DIRECTION		COUNT

6101

6104

6103

6102

6105

SET CANCEL SET VALUE

FIG. 62

INQUIRY OF LOG

VARIATION AMOUNT : 10

USE : 0

REASON CODE : 1

CHANGE REASON : SET ▼

OK Clear

6201 6202 6203 6204 6205 6206

FIG. 63

6301 6302

CORRECTION OF CHANGE LOG

DATE

1997 09 22 ○ = ○ FROM
○ BEFORE ○ ~

SEARCH

NO.	UNIT WORK NAME	CODE	CHANGE REASON	NEW MAN/HR	(NEW) MANUAL	(NEW) USE	PREVIOUS (PREVIOUS) MANUAL	PREVIOUS (PREVIOUS) USE	CHANGE DATE
▶ CH-01-01	ELECTRICAL CHECK	1	SET	10	10	0	0	0	1997/09/22 14.30.00

REASON CODE 1 CHANGE REASON SET



OK

CLR

END

FIG. 64

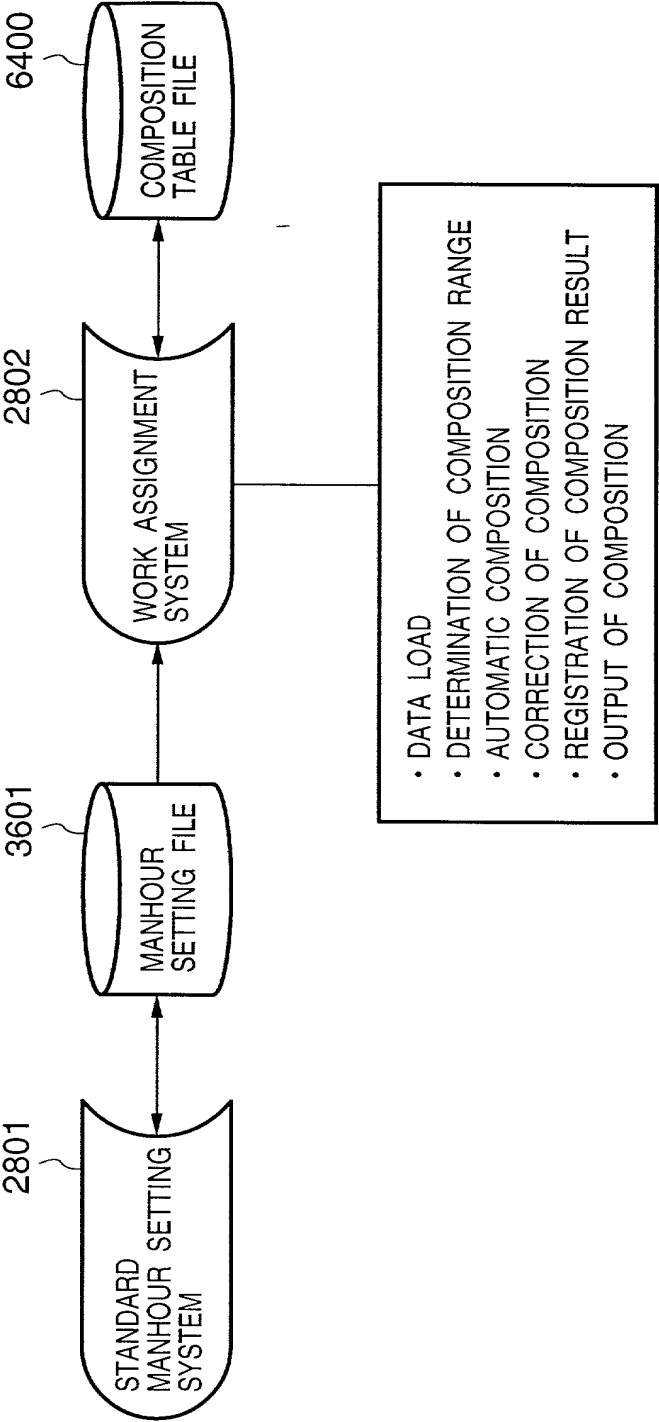


FIG. 65

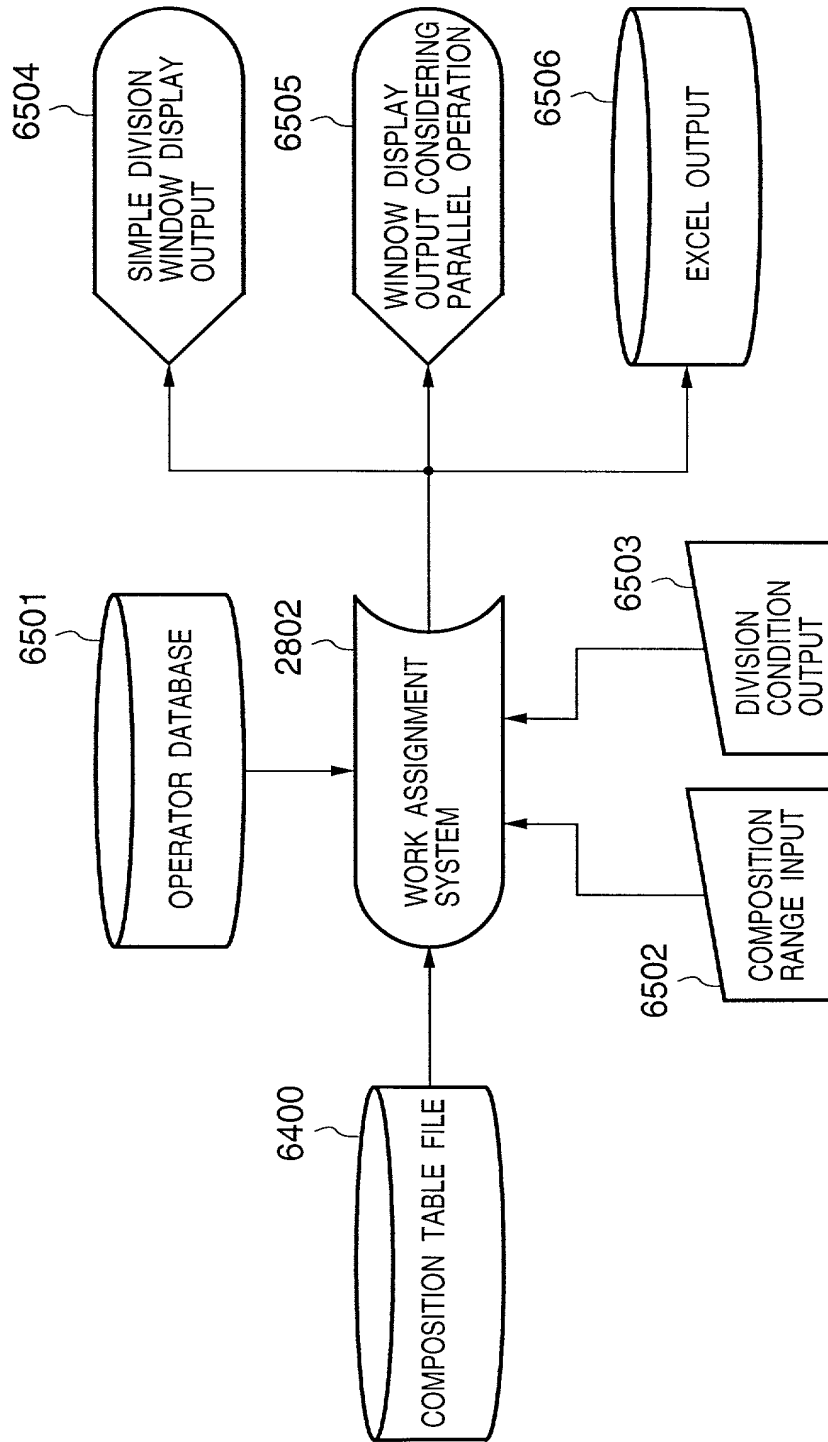
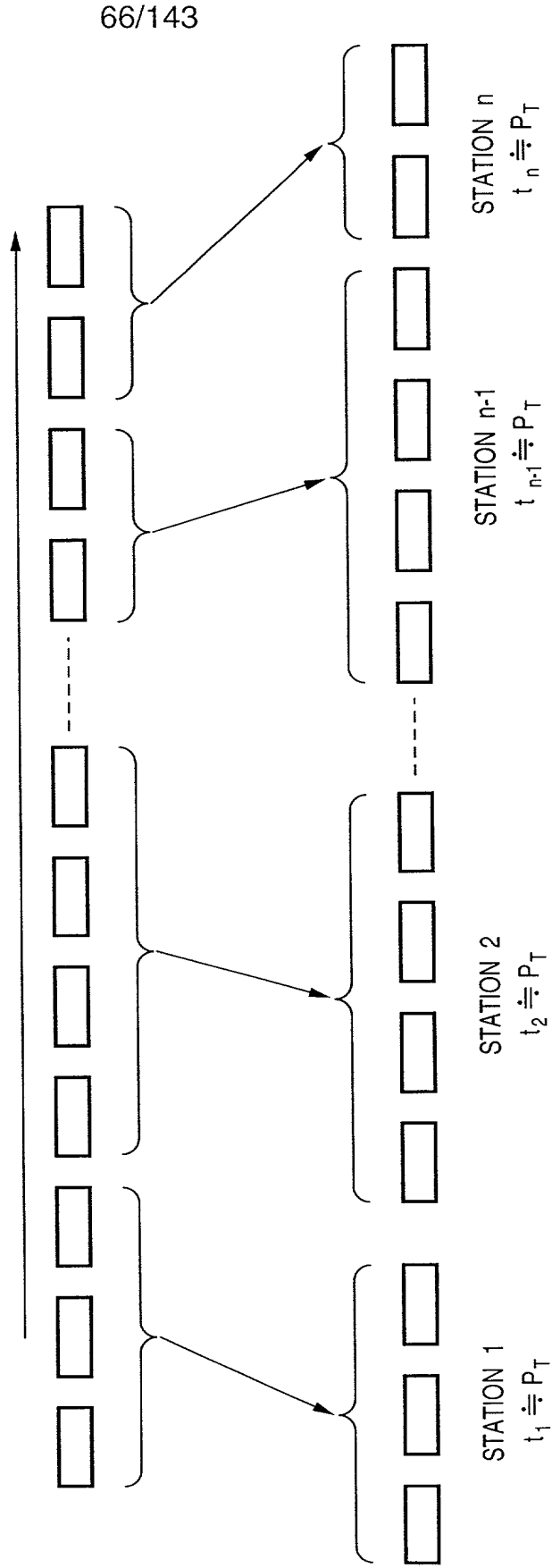


FIG. 66

WORK ORDER



FILE(F) EDIT(E) INPUT(I) TOOL(O)

MODEL GP55

UNIT

STANDARD NO.	WORK NAME	MANHOUR
0001	STICK HANDY CUT TAPE	134
0002	SET LABELS ON MAIN BODY	550
0003	WEIMAN REMOVAL	270
0004	ASSEMBLE OUTER CASE	365
0005	FIT TOP PAD	268
0006	STICK LARGE-SIDE ORDER LABEL	117

SIMPLE DIVISION
PARALLEL DIVISION

:

FIG. 67

FIG. 68

SIMPLE DIVISION

		▼	▲
	FILE(F) EDIT(E)		◆
St 1			
0001	STICK HANDY CUT TAPE	134	
0002	SET LABELS ON MAIN BODY	550	
0003	WEIMAN REMOVAL	270	
St 2			
0004	ASSEMBLE OUTER CASE	365	
0005	FIT TOP PAD	268	
0006	STICK LARGE-SIDE ORDER LABEL	117	
⋮			

FIG. 69

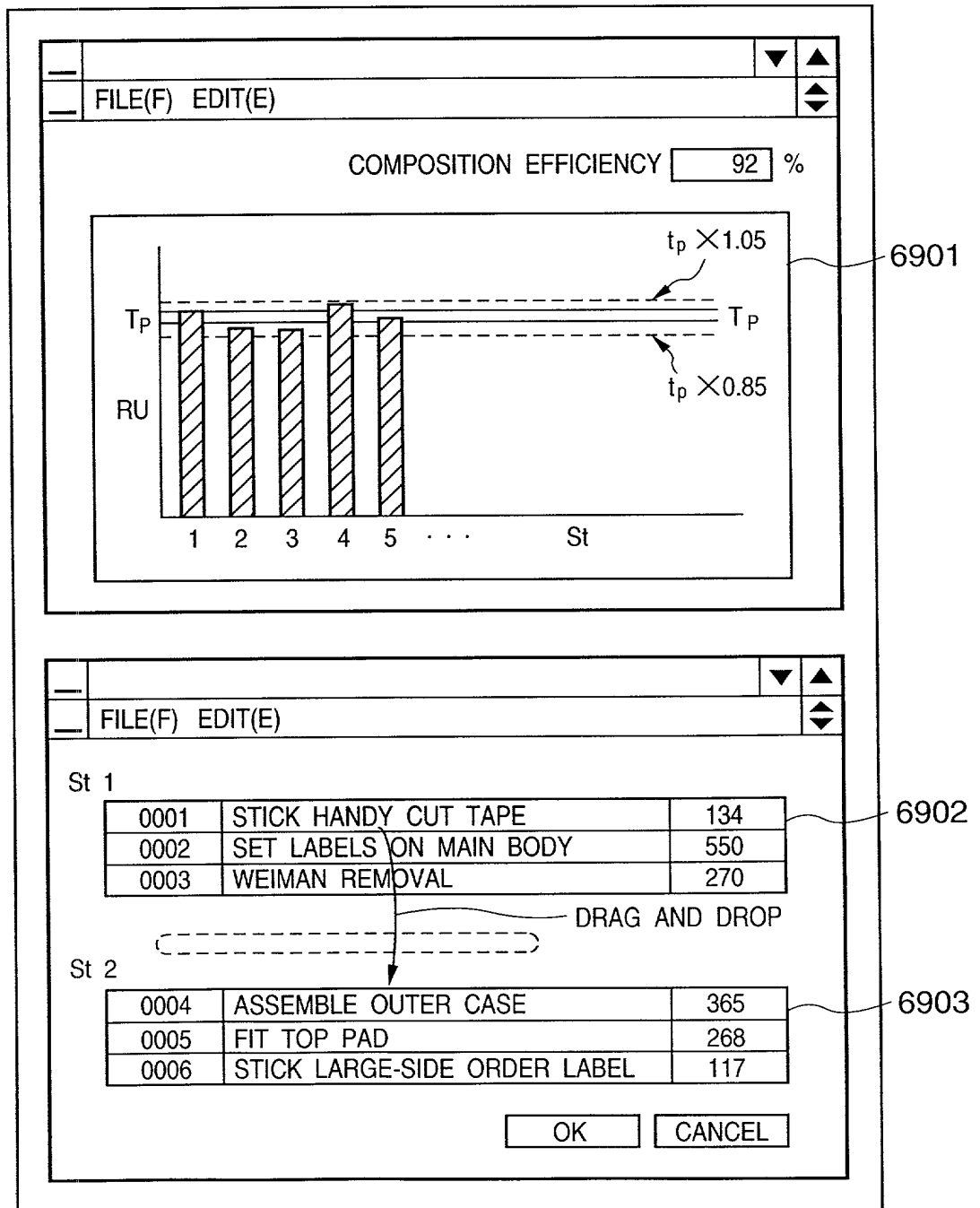


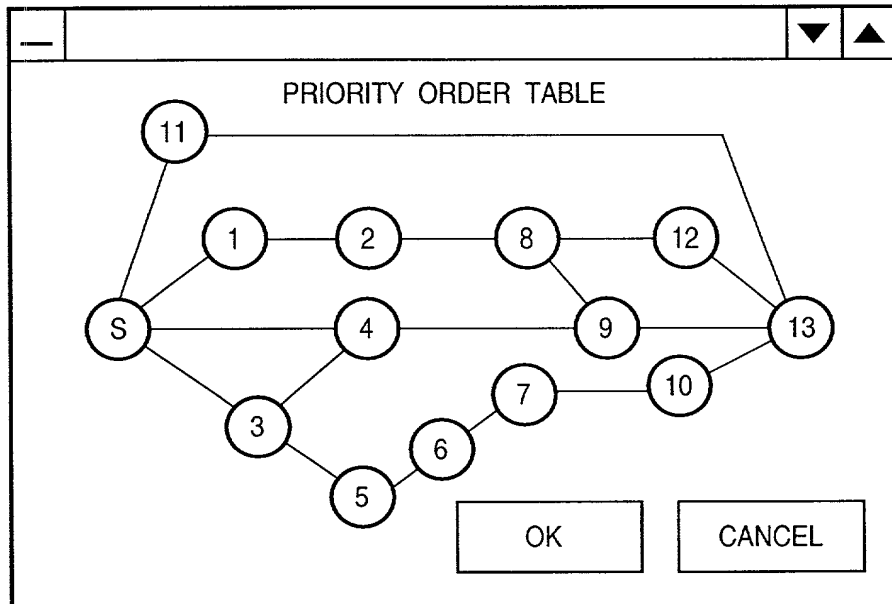
FIG. 70

FIG. 71

PARALLEL DIVISION

				▼	▲
PLAN 2		PLAN 1			
St 1		St 1			
1		1	STICK HANDY CUT TAPE	99	
2		2	SET LABELS ON MAIN BODY	78	
8		3	WEIMAN REMOVAL	134	
St 2		St 2			
3		4	ASSEMBLE OUTER CASE	732	
4		5	FIT TOP PAD	268	
5		6	STICK LARGE-SIDE ORDER LABEL	117	
		⋮			

FIG. 72

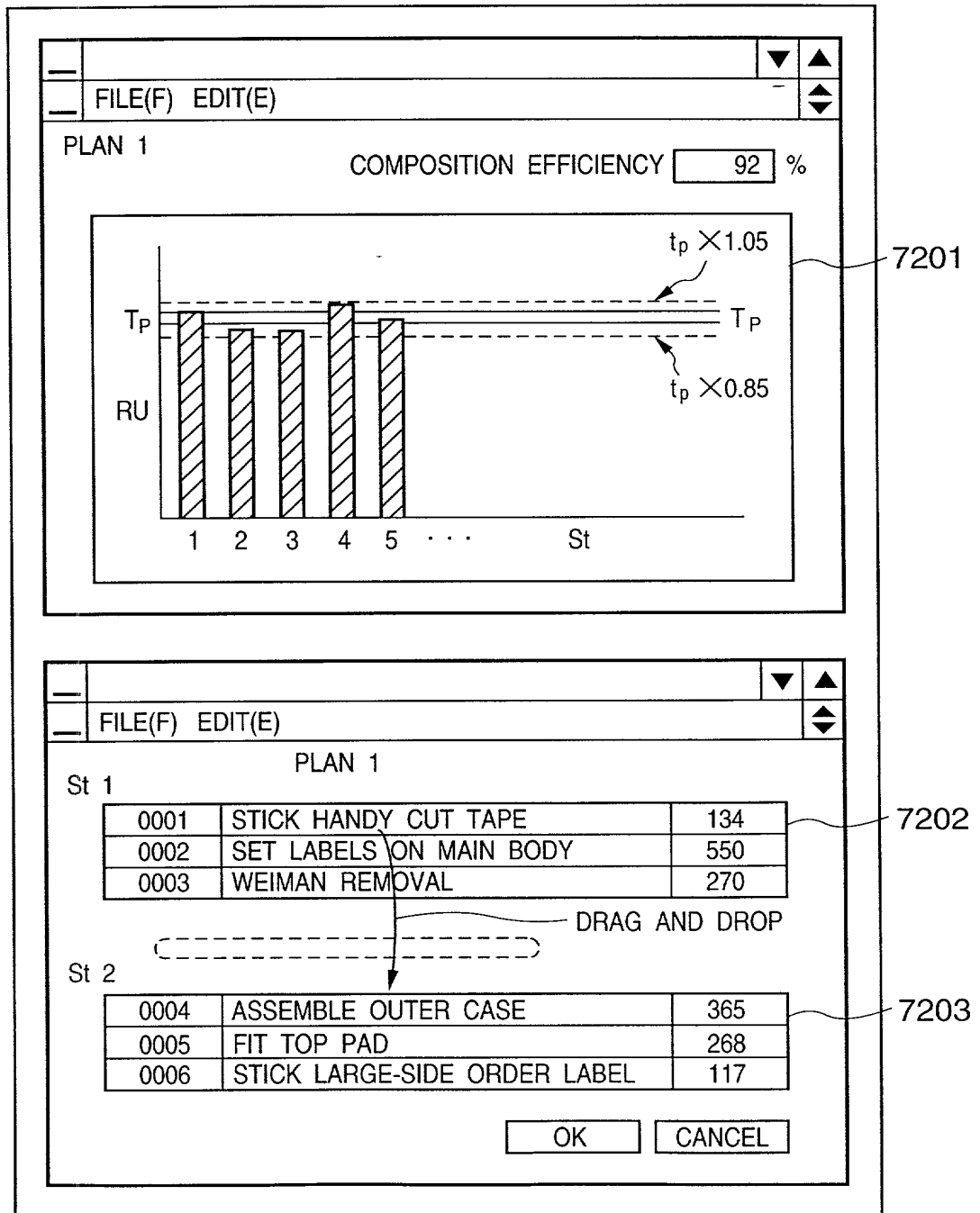


FIG. 73

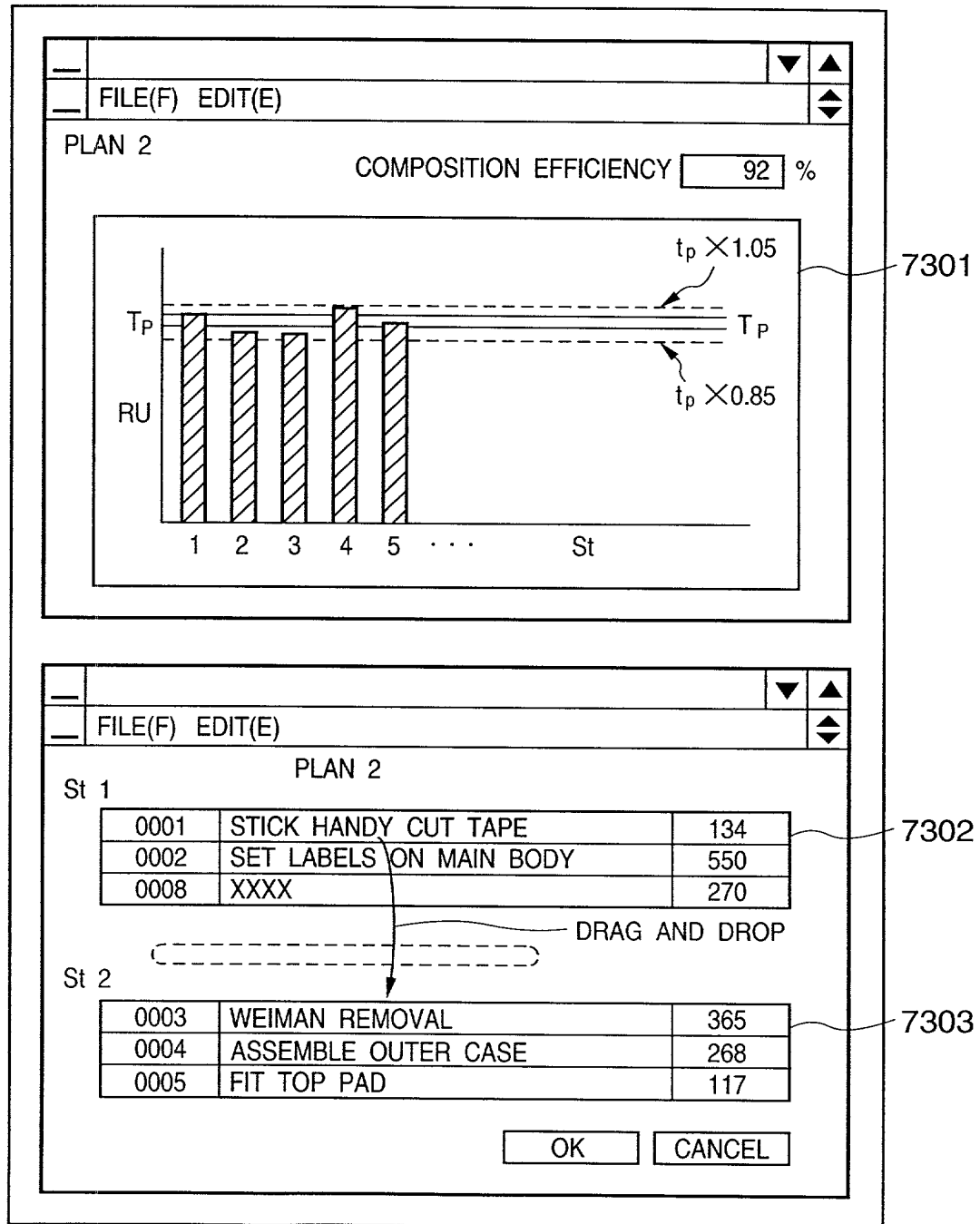


FIG. 74

74/143

LOAD OF NEWLY COMPOSED DATA (MANHOUR)

7401

GENRE

BJ
FAX
LBP
NP
STAND

7405

REPRESENTATIVE
MODEL

7406

TARGET MODEL

7407

COMPONENT
SYMBOL

7408

COMPONENT NAME

7409

ORDER

OK

CANCEL

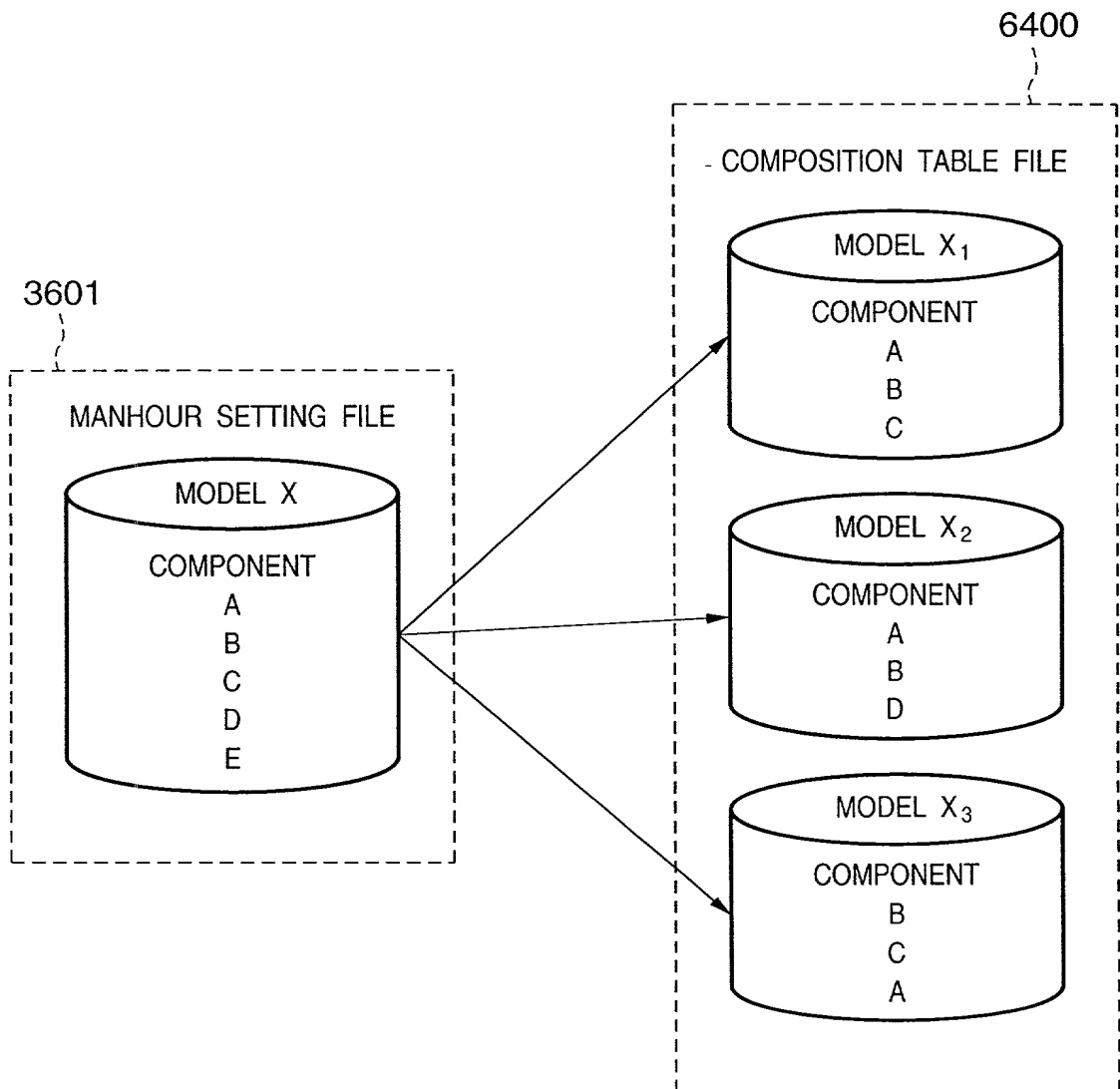
FIG. 75

FIG. 76

7601

7602

7603

7604

OPEN FILE

TARGET MODEL

NAME

REVISION NUMBER

SAVE DATE

f12-0010.csv	テストデータ(元)	1	97/09/19 12:00:34
f12-0010.csv	テスト	0	97/09/19 13:27:17
BJC-4300	0	0	97/09/19 14:10:14
BJC-4300	0	0	97/09/19 14:10:32
		1	97/09/19 15:41:14
BJC-4300	BJC-4300Aライン編成		97/09/20 14:16:58
BJC-4300	BJC-4300Aライン編成	03	97/10/13 17:54:57
BJC-4300	BJC-4300Aライン編成	00	97/09/20 14:06:36
f12-0010.csv	f12-0010Aライン編成	05	97/09/24 17:11:53

SELECT WINDOW

○ COMPOSITION DATA INPUT WINDOW

○ COMPOSITOR DATA CORRECTION WINDOW

OK

CANCEL

7606

FIG. 78

INSERTION OF UNIT WORK ✕

NEW WORK WILL BE INSERTED BEFORE
"STICK CHECK SHEET SERIAL NO."

INPUT WORK NAME AND PROVISIONAL MANHOUR VALUE

UNIT WORK NAME :

PROVISIONAL MANHOUR : (RU)

REMARKS :

OK

CANCEL

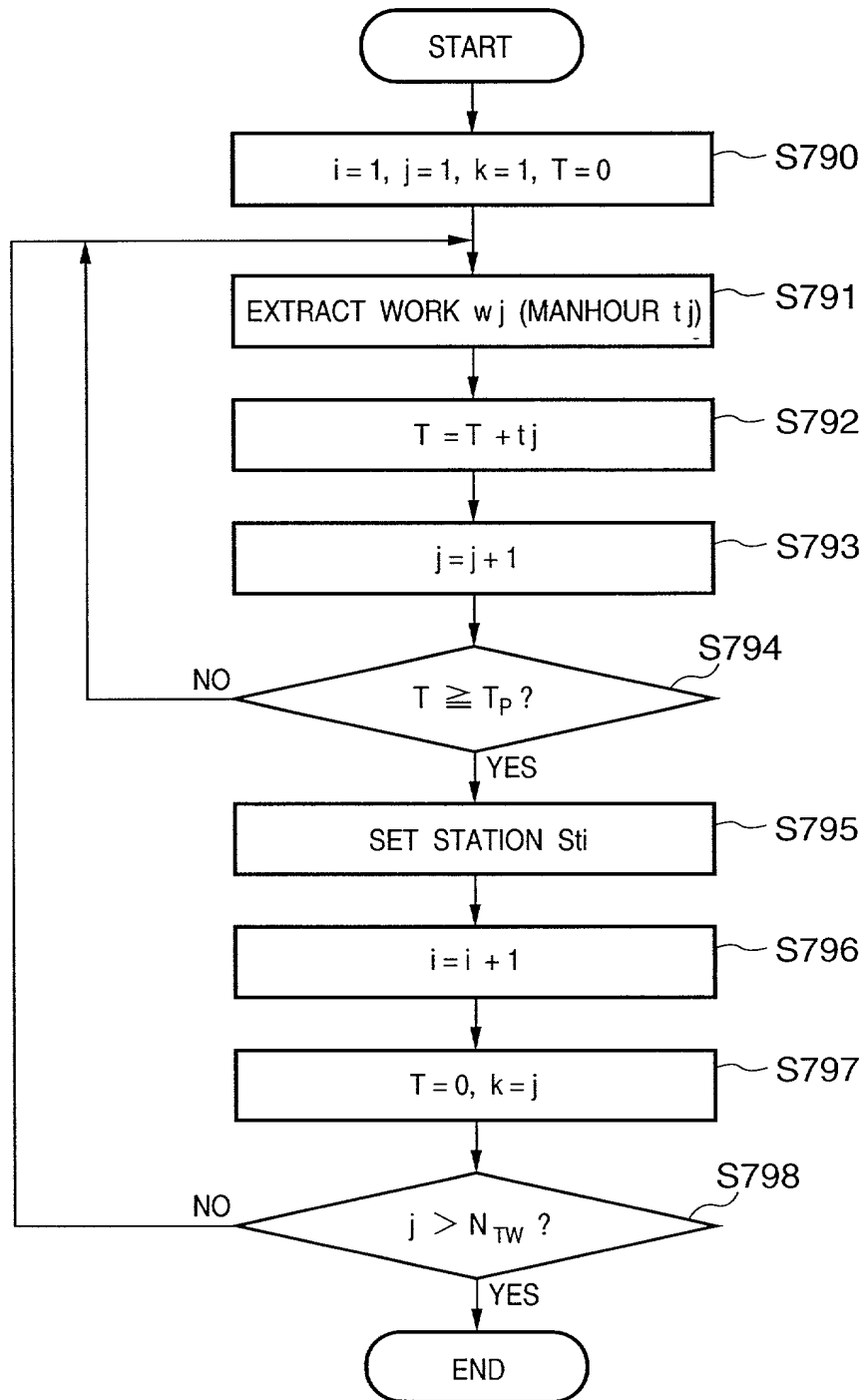
FIG. 79

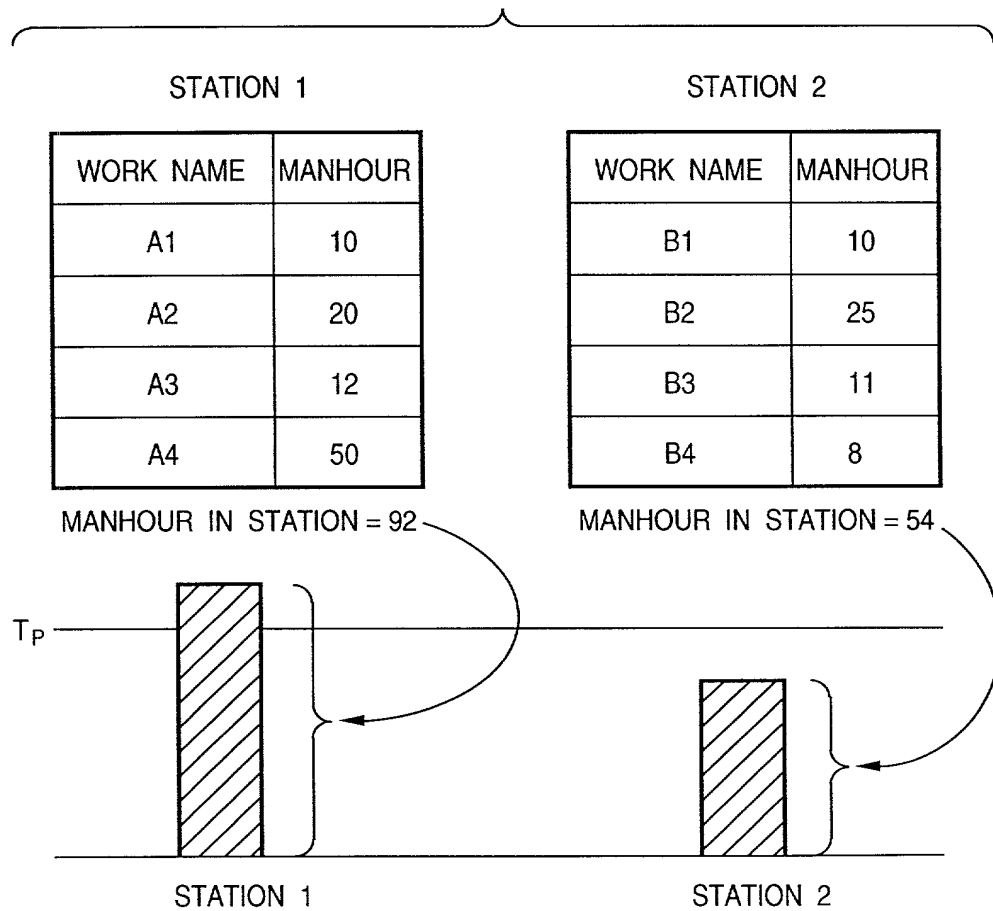
FIG. 81

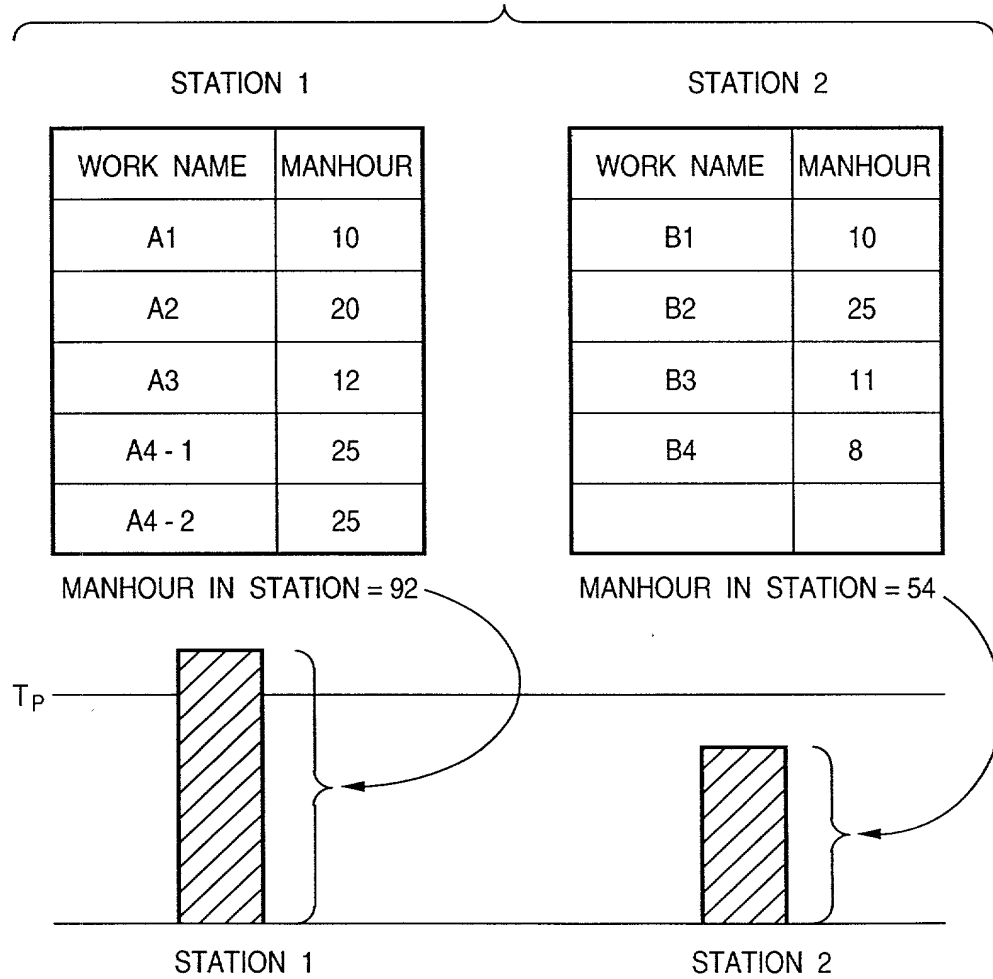
FIG. 82

FIG. 83

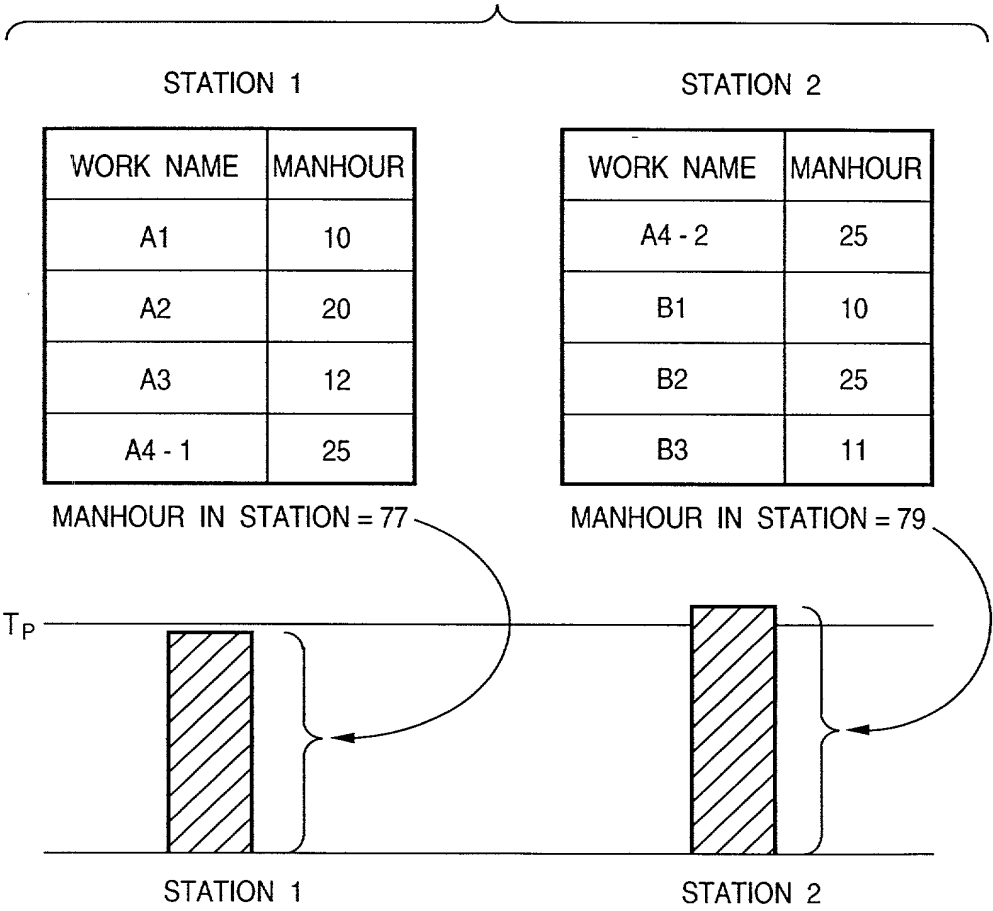


FIG. 84

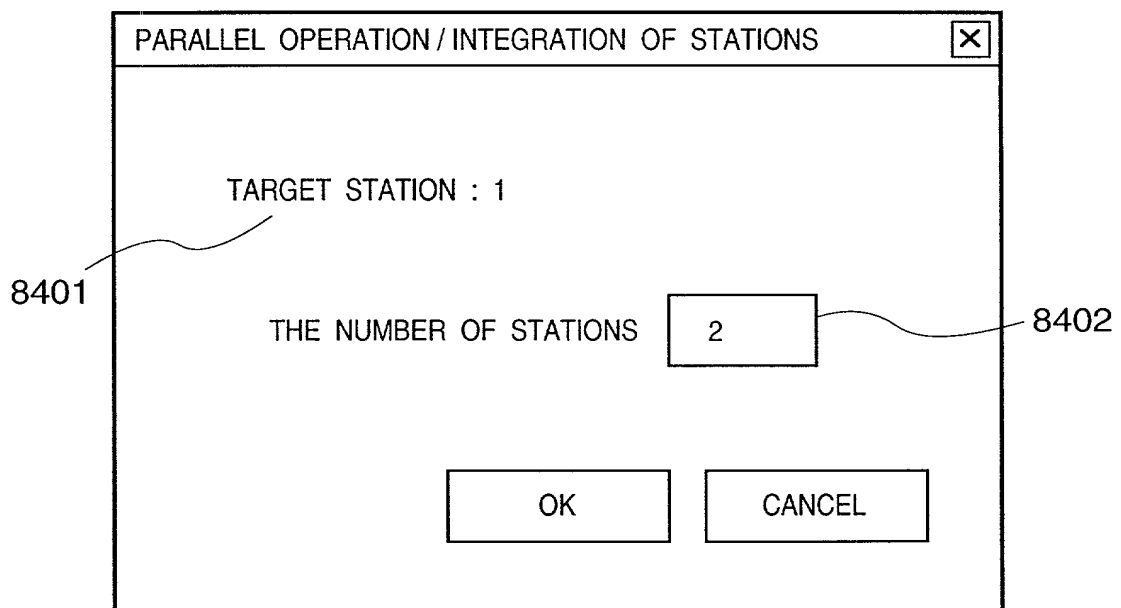


FIG. 85

FILE(E) EDIT(E) VIEW(V) TOOL(T)

OPERATOR 1

S11

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL
START	0	0	No
UNIT WORK NAME 1	34	10	No.01
UNIT WORK NAME 2	255	46	No.02
UNIT WORK NAME 6	92	26	No.06
UNIT WORK NAME 7	52	0	No.07
UNIT WORK NAME 8	52	0	No.08
UNIT WORK NAME 9	0	36	No.09

TOTAL 585 (RU)

PF 83.6%

PARALLEL STATIONS

900

720

540

360

180

0

--- tp

--- tp*1.05

--- tp*0.85

--- t

OPERATOR 2

S12

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL
UNIT WORK NAME 3	156	0	No.03
UNIT WORK NAME 4	34	0	No.04
UNIT WORK NAME 5	138	23	No.06
UNIT WORK NAME 10	71	48	No.10
UNIT WORK NAME 11	138	30	No.11
UNIT WORK NAME 12	97	20	No.12
UNIT WORK NAME 13	88	0	No.14
UNIT WORK NAME 14	46	18	No.15
UNIT WORK NAME 15	546	15	No.16
UNIT WORK NAME 17	58	20	No.17

TOTAL 1548 (RU)

PF 23.5 %

xxxxxx

OPERATOR 3

S13

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL
UNIT WORK NAME 13	30	40	No.13
UNIT WORK NAME 16	303	131	No.18

TOTAL 572 (RU)

PF 96.7%

OPERATOR 4

S14

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL
UNIT WORK NAME 19	84	26	No.19
UNIT WORK NAME 20	120	20	No.20
UNIT WORK NAME 21	310	66	No.21

TOTAL 623 (RU)

PF 95.2%

OPERATOR 5

S15

WORK NAME	WF	PROV- SIONAL MANHOUR	MA- CHINE UAL
UNIT WORK NAME 22	146	71	No.22
UNIT WORK NAME 23	106	26	No.23
UNIT WORK NAME 24	61	0	No.24
UNIT WORK NAME 25	51	10	No.25
END	0	0	No.X

TOTAL 486 (RU)

PF 73.6%

COMPOSITION
EFFICIENCY %

NET COMPOSITION
EFFICIENCY %

116

COMPOSITION MODE: PRIORITY ORDER SCHEME

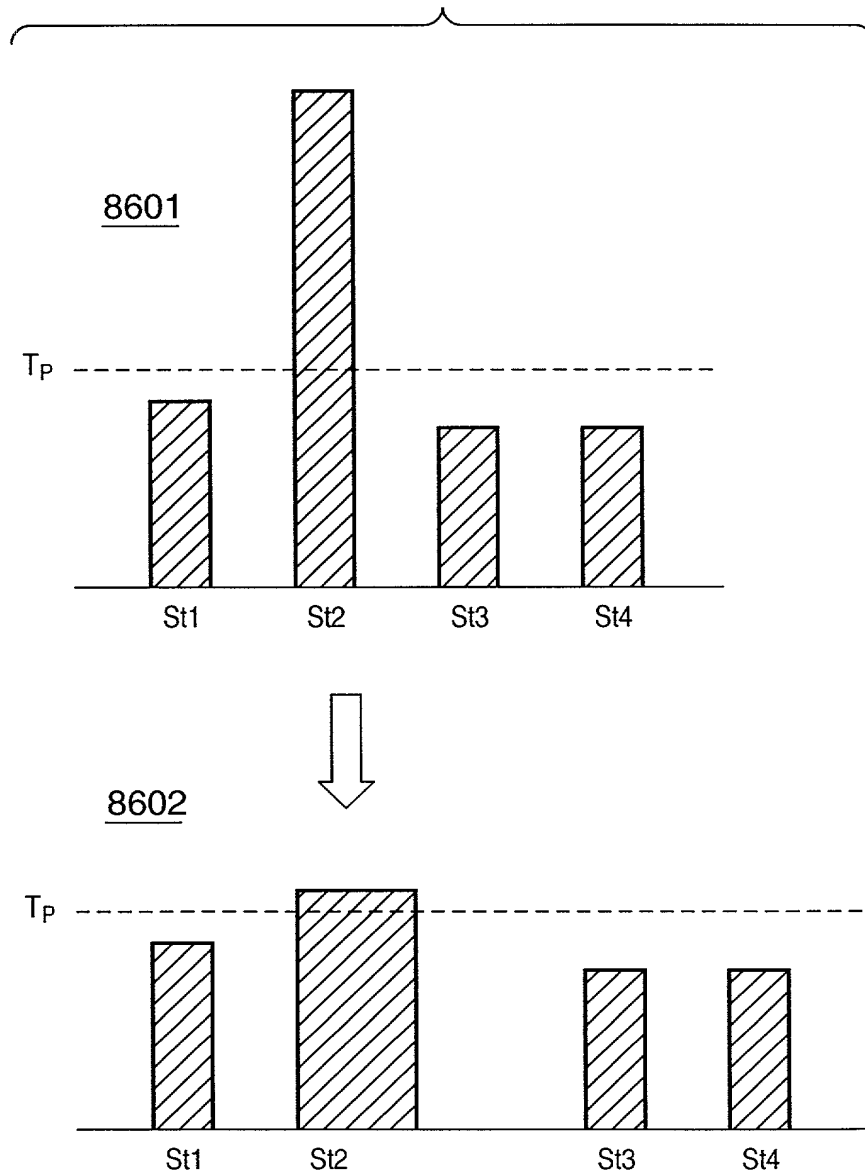
FIG. 86

FIG. 87

USER REGISTRATION

NAME CODE :

12345

8701

NAME :

田中

一郎

8702

POSITION :

kumitate

8703

PASSWORD :

12345

8704

AUTHORITY :

8705

OK

CANCEL

FIG. 88

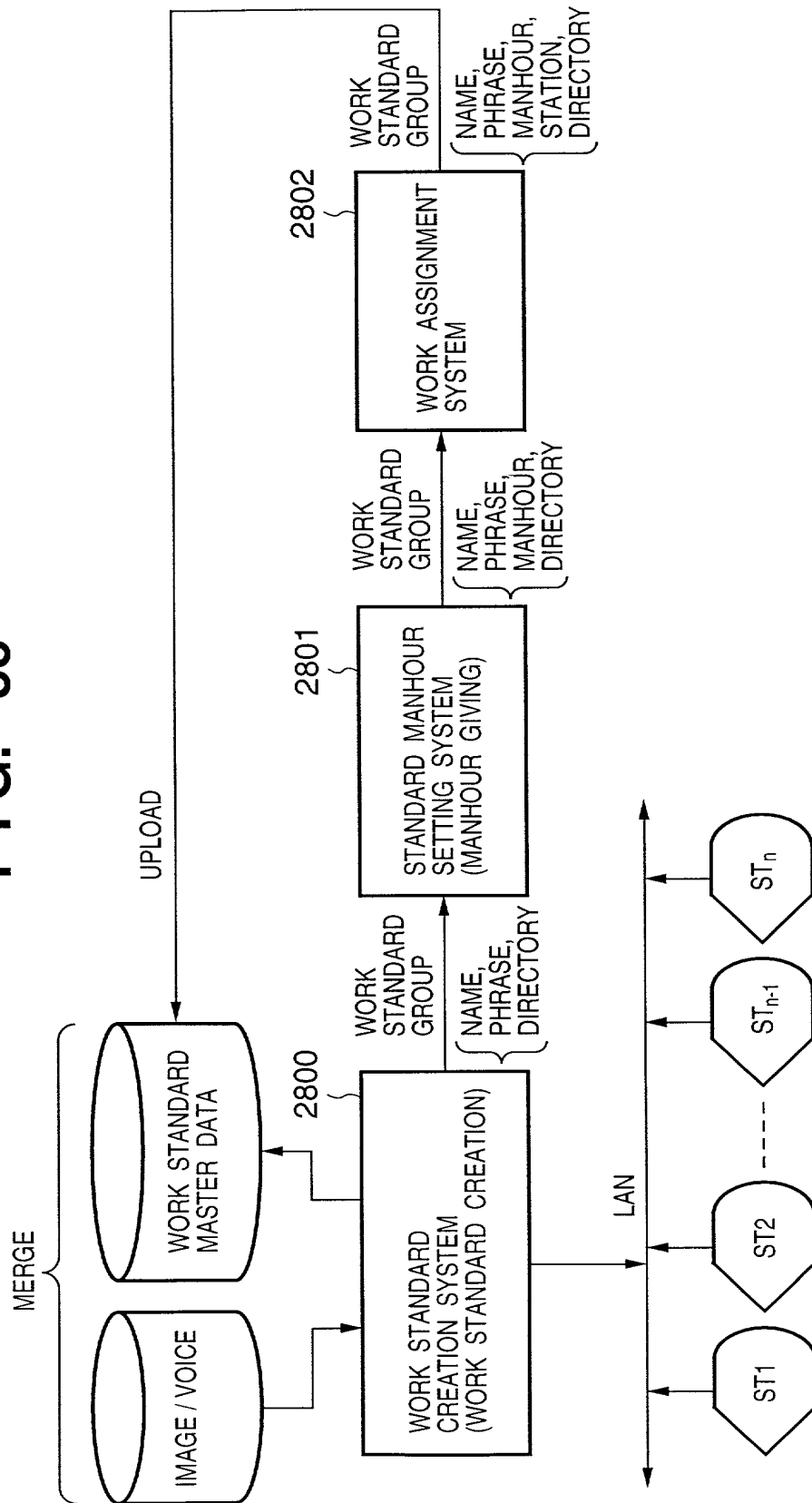


FIG. 89

DIRECTORY NAME	IMAGE DATA	OPERATION (VERB)	PARAMETER 1	PARAMETER 2	PARAMETER 3
xxxxxx1	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 10mm	TORQUE 10Kg.M
xxxxxx2	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 20Kg.M
xxxxxx3	SCREW	SCREW	SCREW CLOCKWISE	DISTANCE MOVEMENT 20mm	TORQUE 30Kg.M
...
yyyyyy1	ROTATE	ROTATE	CLOCKWISE	DISTANCE MOVEMENT 20mm	
yyyyyy2	ROTATE	ROTATE	COUNTERCLOCKWISE	DISTANCE MOVEMENT 20mm	
...
zzzzzz1	OPEN	OPEN	OPEN UPWARD	DISTANCE MOVEMENT 30mm	WEIGHT 100g
zzzzzz2	OPEN	OPEN	OPEN DOWNWARD	DISTANCE MOVEMENT 40mm	WEIGHT 200g
...

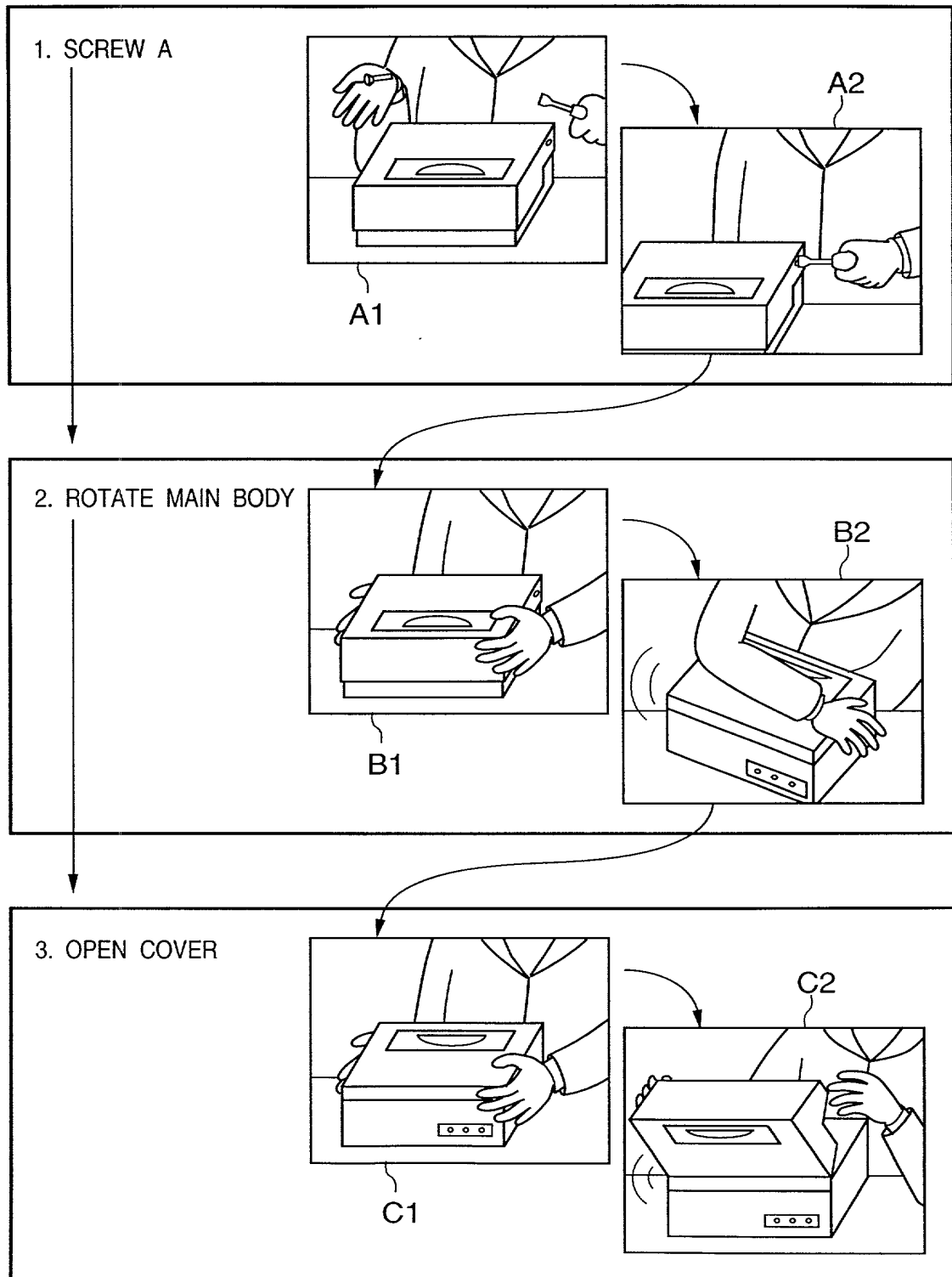
FIG. 90

FIG. 91

9101 9102

SETTING OF COMPONENT SYMBOL

PRODUCT SYMBOL : BJ - 970909

COMPONENT SYMBOL : CH

COMPONENT NAME : CHECK

OK SEARCH COMPONENT CANCEL

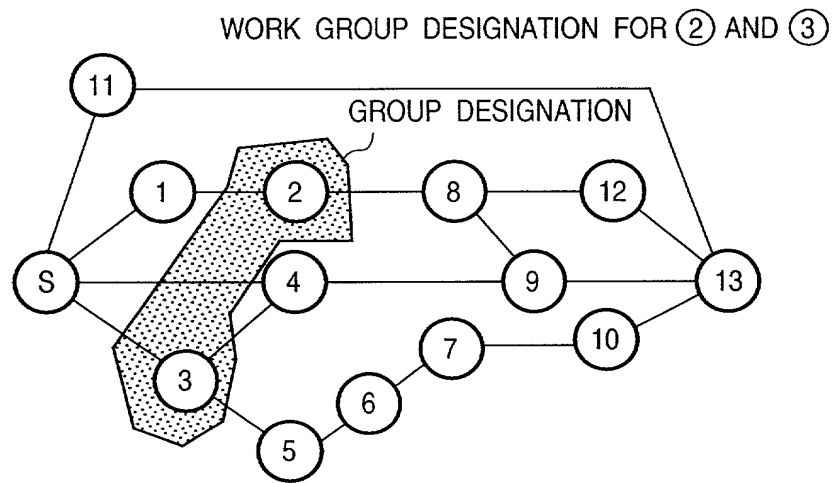
FIG. 92

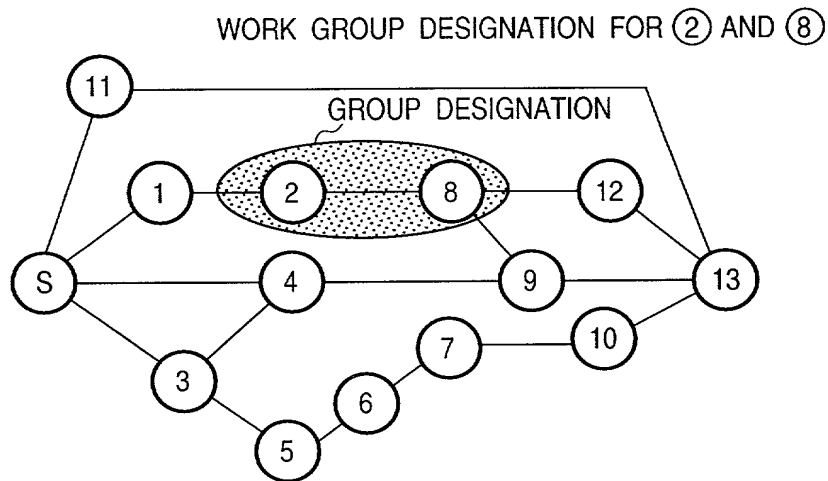
FIG. 93

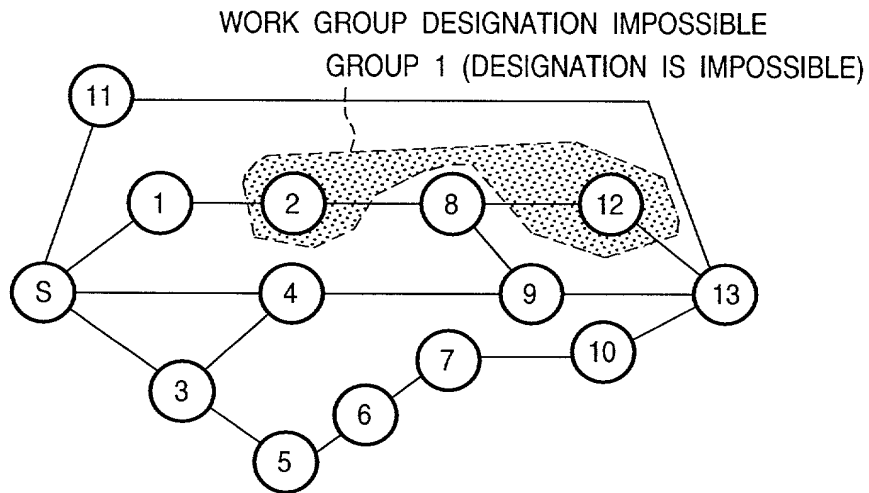
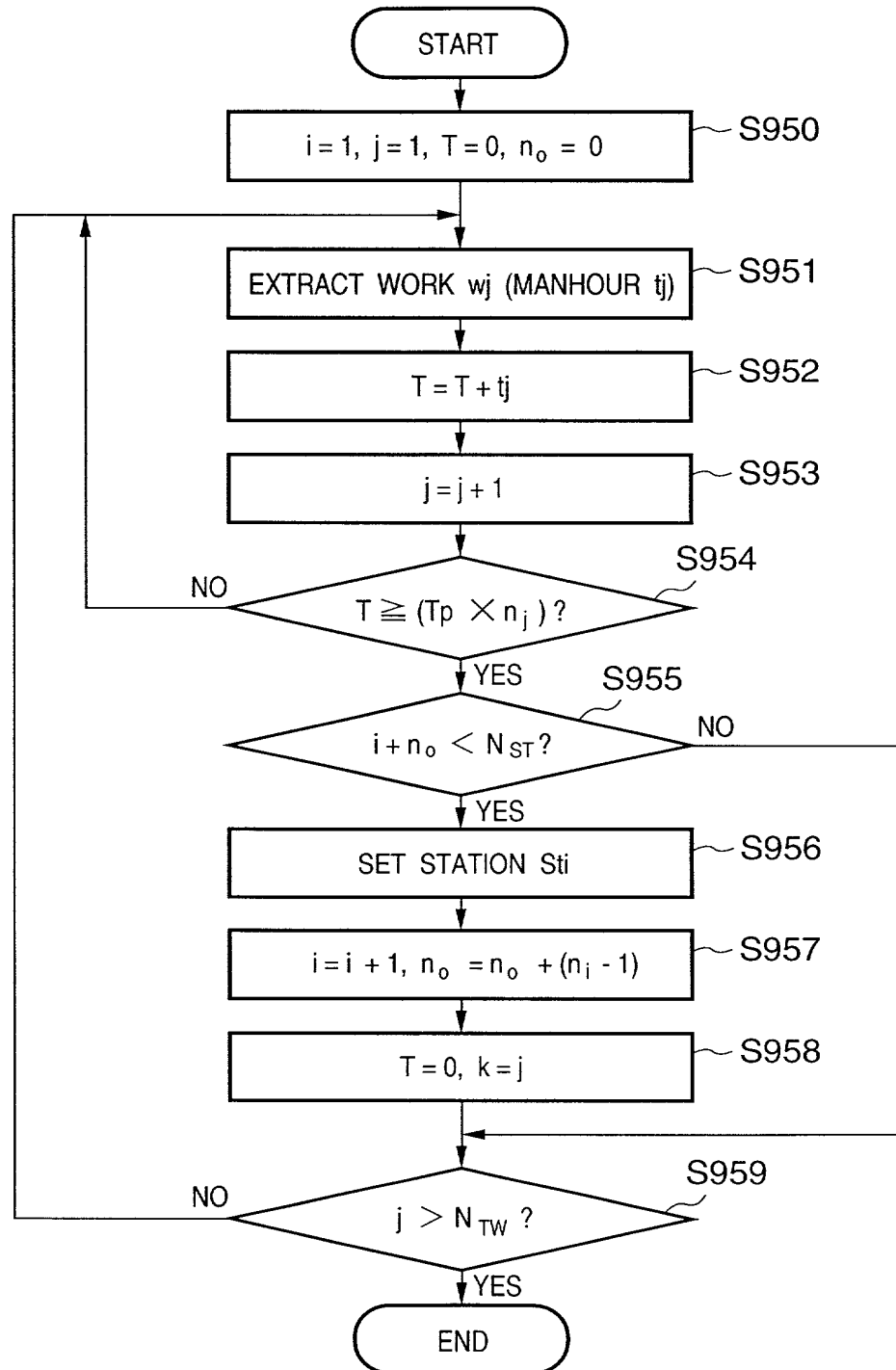
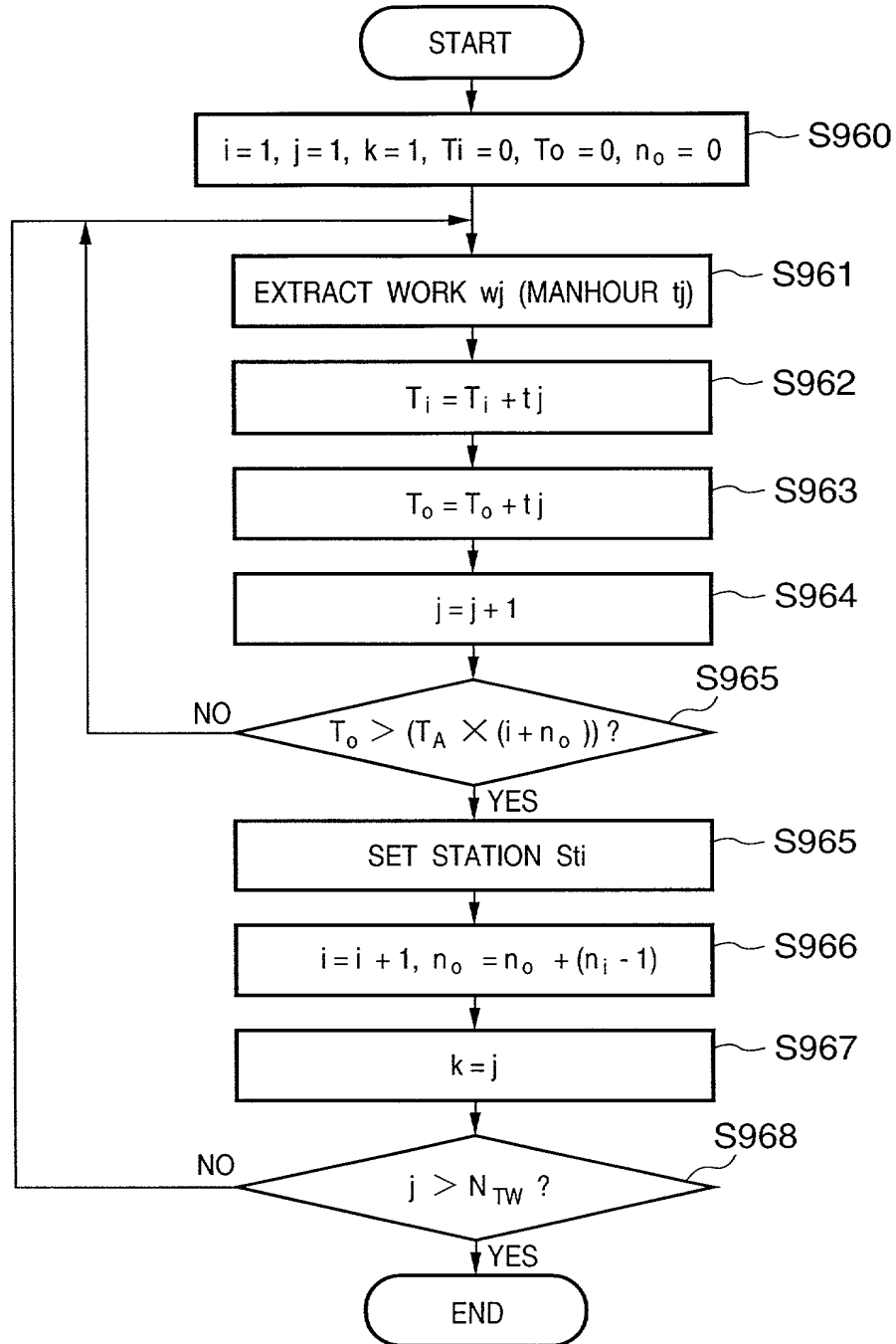
FIG. 94

FIG. 95

N_{ST} : THE NUMBER OF STATIONS
 n_i : i STATION PARALLEL NUMBER
 n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 96

N_{ST} : THE NUMBER OF STATIONS

T_i : i STATION MANHOUR

T_A : STATION MANHOUR AVERAGE VALUE

$$T_A = WF / N_{ST}$$

T_o : TOTAL ACCUMULATED MANHOUR

n_i : i STATION PARALLEL NUMBER

n_o : TOTAL ACCUMULATED PARALLEL SUM NUMBER

FIG. 97

FILE(E) EDIT(E) VIEW(D) TOOL(I)

OPERATOR 1 OPERATOR 2 OPERATOR 3 OPERATOR 4 OPERATOR 5 OPERATOR 6

St1 St2 St3 St4 St5

WORK NAME	WF	PROV- SIONAL MANHOURL	MA- CHINE UAL	MAN- UAL
START	0	0	No	
UNIT WORK NAME 1	34	10	No 01	
UNIT WORK NAME 2	255	46	No 02	
UNIT WORK NAME 6	92	26	No 06	
UNIT WORK NAME 7	52	0	No 07	
UNIT WORK NAME 8	52	0	No 08	
UNIT WORK NAME 9	0	36	No 09	
UNIT WORK NAME 10	71	48	No 10	
UNIT WORK NAME 11	138	30	No 11	
UNIT WORK NAME 12	97	20	No 12	
UNIT WORK NAME 13	88	0	No 14	
UNIT WORK NAME 14	46	18	No 15	
UNIT WORK NAME 15	546	15	No 16	
UNIT WORK NAME 16	58	20	No 17	
UNIT WORK NAME 19	84	26	No 19	
UNIT WORK NAME 20	120	20	No 20	
UNIT WORK NAME 21	310	66	No 21	
UNIT WORK NAME 22	146	71	No 22	
UNIT WORK NAME 23	106	26	No 23	
UNIT WORK NAME 24	61	0	No 24	
UNIT WORK NAME 25	51	10	No 25	
END	0	0	No X	

TOTAL 585 (RU) PF 83.6% PARALLEL STATIONS PF 117.3%

TOTAL 1548 (RU) xxxxxx

PARALLEL STATIONS

900
720
540
360
180
0

1 2 3 4 5

--- tp
--- tp*1.05
--- tp*0.85
--- t

G STANDARD NO. WORK NAME

WF MEANS CHINE MANHOURL

MA- CHINE MANHOURL

PROVISIONAL REMARKS

COMPOSITION MODE : PRIORITY ORDER SCHEME

COMPOSITION EFFICIENCY % 96.43 %

NET COMPOSITION EFFICIENCY %

TOTAL 486 (RU) PF 73.6%

TOTAL 6238 (RU) PF 95.2%

TOTAL 572 (RU) PF 96.7%

FIG. 98A

FIG. 98A

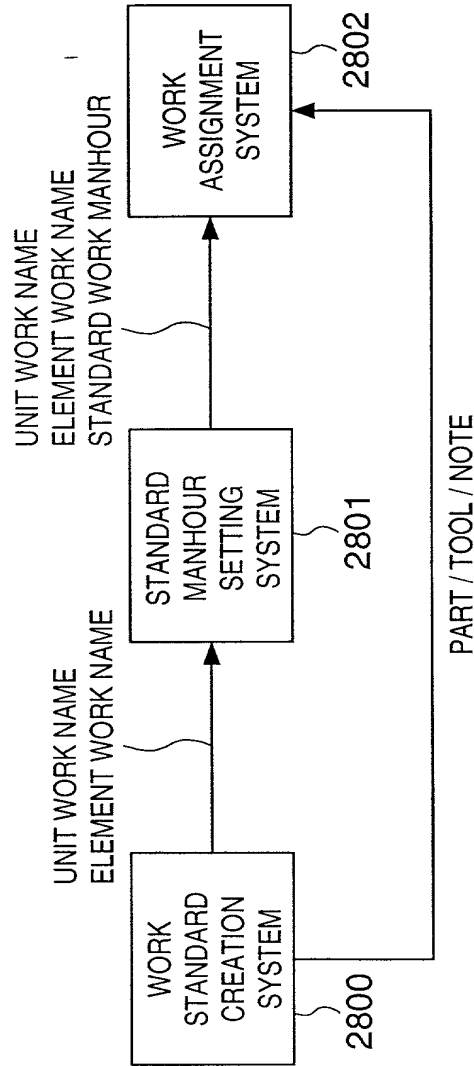


FIG. 98B

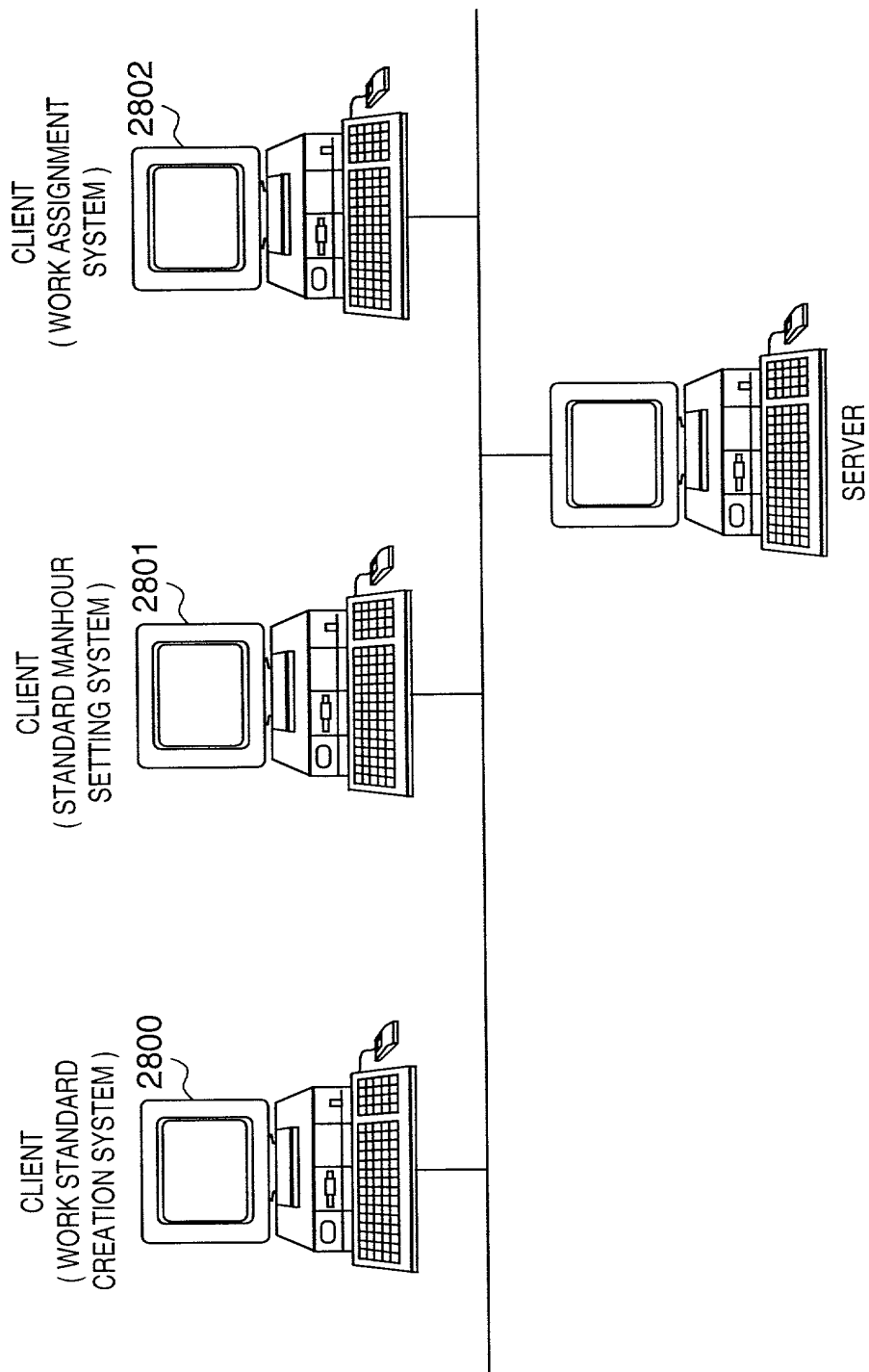


FIG. 99A

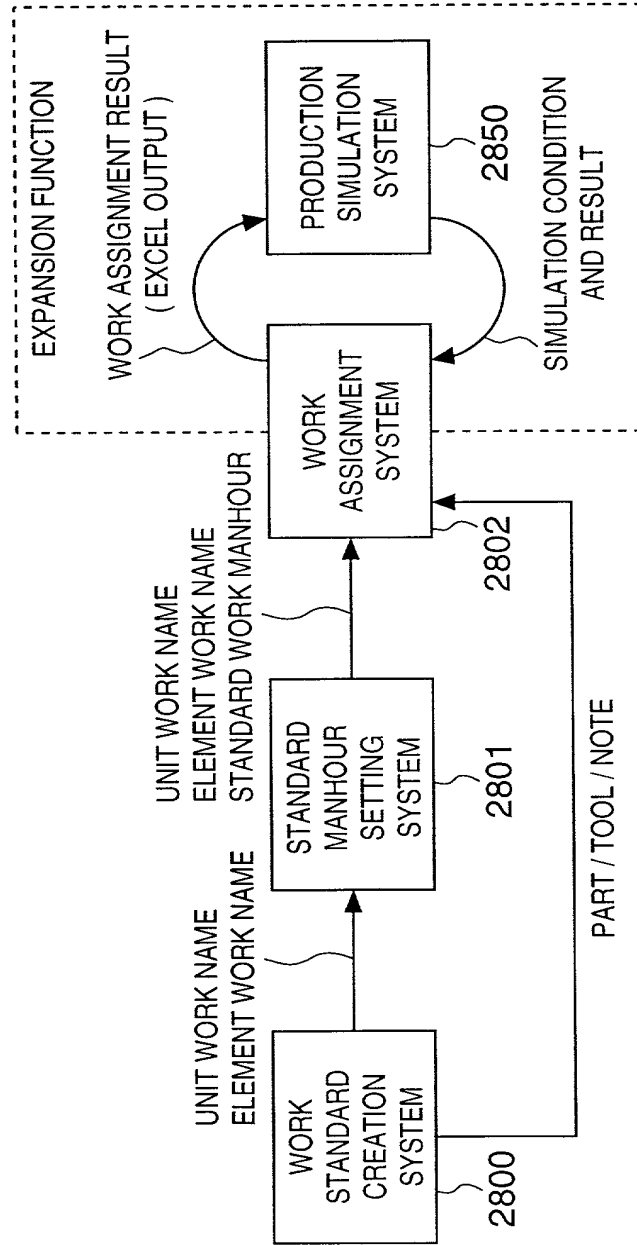


FIG. 99B

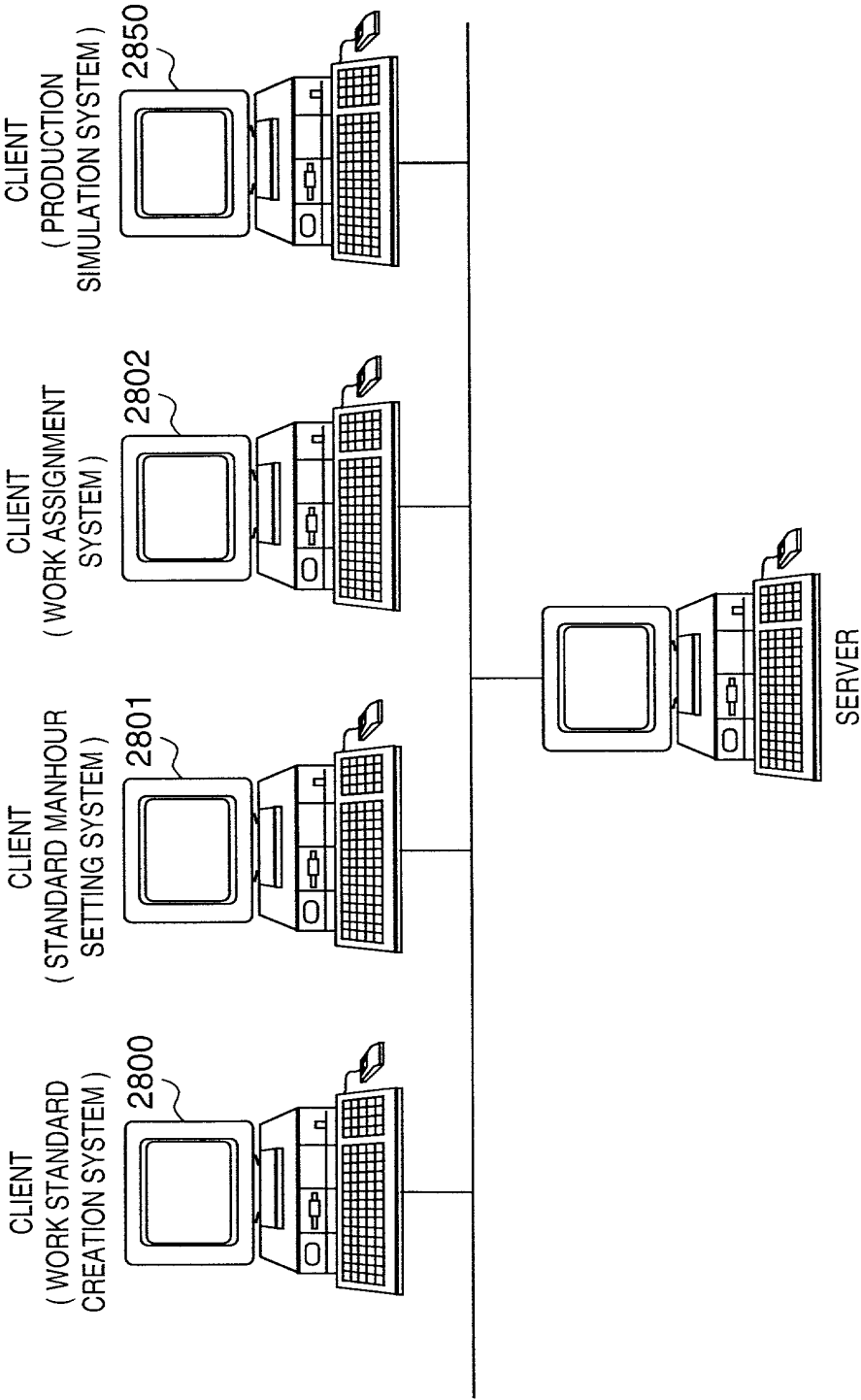


FIG. 100

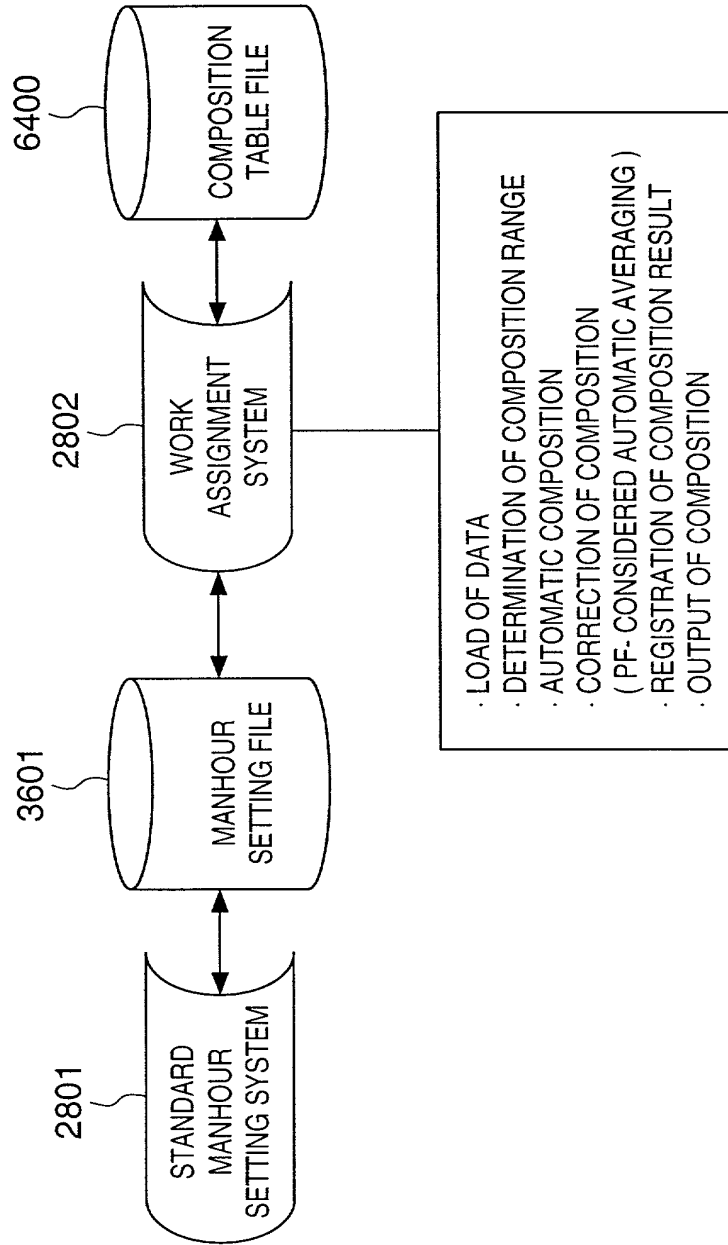


FIG. 101

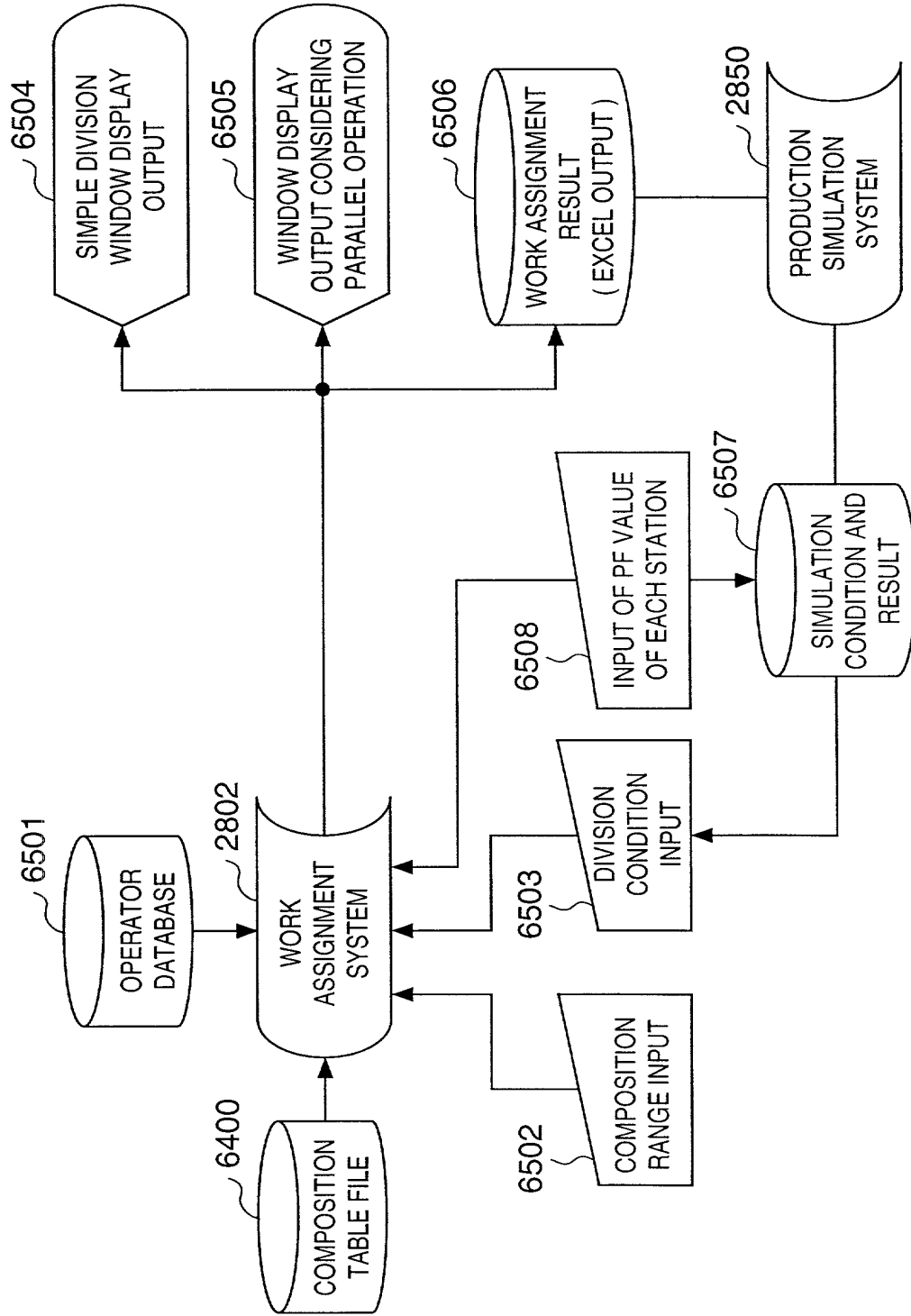
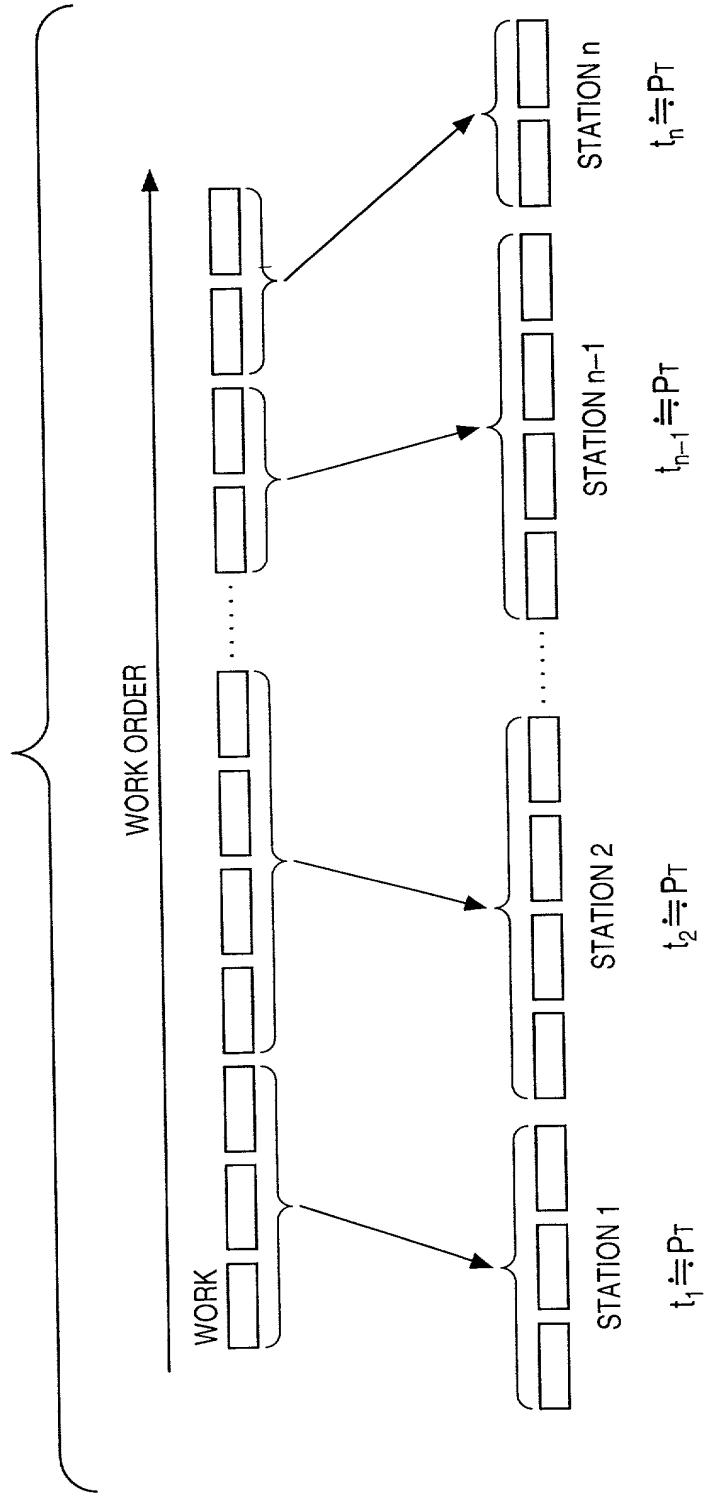


FIG. 102



PT : PITCH TIME
 $t_1 \dots t_n$: STATION MANHOURL

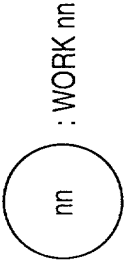
$$\left\{ \begin{array}{l} \text{ } \end{array} \right.$$


FIG. 104

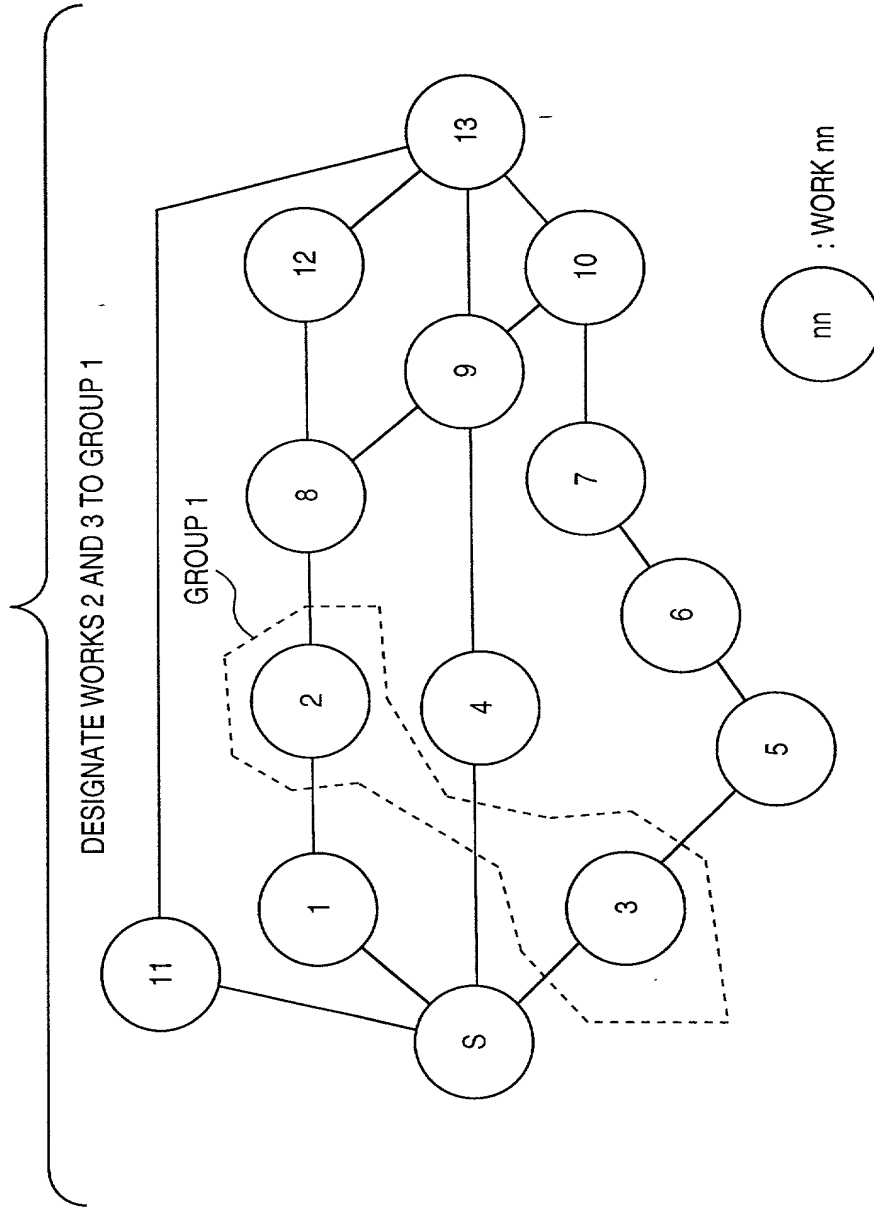


FIG. 105

INPUT OF COMPOSITION DATA

FILE(E) EDIT(E) TOOL(T) CHANGE WORK ORDER(M) OPTION(O)

COMPOSITION DATA

TARGET FILE NAME REVISION NUMBER G

MODEL (COMPOSITION NAME)

PER1000 TEST CASE 01

WORK TOOL PART NOTE

COMPOSITION PRIORITY ORDER SCHEME

MODE

PROVISIONAL SECTION

GNO. STANDARD NO. WORK NAME WF MANUAL MACHINE MANHOUR COMPONENT REMARKS

G	SERIAL NO.	WORK STANDARD NO.	WORK NAME	WF MANHOUR	MANUAL MANHOUR	MACHINE MANHOUR	COMPONENT NAME	NO.	PREVIOUS
1	1	9000000000000001E	単位名称s1	579	579	0	セツト	1	
1	2	9000000000000002E	単位名称s2	54	54	0	セツト	2	1
1	3	9000000000000003E	単位名称s3	10	10	0	セツト	3	2
1	4	9000000000000004E	単位名称s4	50	50	0	セツト	4	3
1	5	9000000000000005E	単位名称u1	63	63	0	ユニツト	5	4
1	6	9000000000000006E	単位名称u2	30	30	0	ユニツト	6	4
1	7	9000000000000007E	単位名称u3	156	156	0	ユニツト	7	6
1	8	9000000000000008E	単位名称u4	35	35	0	ユニツト	8	4
1	9	9000000000000009E	単位名称u5	162	162	0	ユニツト	9	8

INPUT DATA

THE EXPECTED NUMBER OF PRODUCTS: 240 UNITS

THE NUMBER OF DEFECTIVE PRODUCTS: 60 UNITS

THE NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE: 240 UNITS

WORKING TIME: 450 MIN

BREAK TIME: 15 MIN

MORNING MEETING TIME: 1 MIN

EXERCISE TIME: 5 MIN

LINE STOP TIME: 0 MIN

OTHERS: 0 MIN

OPERATION TIME: 429 MIN

EXPECTED COMPOSITION EFFICIENCY: 95 %

CALCULATE

OUTPUT DATA

STATION (ROUND DOWN) 10 St

COMPOSITION EFFICIENCY 95 %

STATION (ROUND UP) 1 St

COMPOSITION EFFICIENCY 83 %

THE NUMBER OF STATIONS 7 St

COMPOSITION EFFICIENCY 95 %

CALCULATION RESULT

THE NUMBER OF STATIONS 7 St

PITCH TIME (tp) 1787.5 RU

ASSIGN WORK END

THE NUMBER OF WORKS IN COMPOSITION: 141

TOTAL: 11903 (RU)

TOTAL MANHOUR IN COMPOSITION: 11903 (RU)

TOTAL MANHOUR OUTSIDE WORKSHOP: 0 (RU)

TOTAL MANHOUR OUTSIDE COMPOSITION: 0 (RU)

TOTAL MANHOUR OUTSIDE WORKSHOP: 0 (RU)

37706

37709 37707

37708

FIG. 106

9003 CORRECTION OF COMPOSITION DATA

FILE(F) EDIT(E) VIEW(V) TOOL(T)

SAVE(S) SAVE AS(A) DELETE(D) PREVIOUS WINDOW(W) EXCEL OUTPUT

9004 WORK ASSIGNMENT SYSTEM(X)

9001

	S13			S14			S15					
	WORK NAME	WF	PROVISIONAL MAN-HOUR	STANDARD	WORK NAME	WF	PROVISIONAL MAN-HOUR	STANDARD	WORK NAME	WF	PROVISIONAL MAN-HOUR	STANDARD
電気・負圧	メインケース	279	0	S0-0	印字検査	710	0	CH-0	外観検査	116	0	CH-0
電気・負圧	フロントカバー	47	0	S0-0	印字検査	0	0	CH-0	外観検査	270	0	CH-0
電気・負圧	内観	55	0	S0-0	内観検査	115	0	CH-0	本体テープ貼付	77	0	K0-0
電気・負圧	内観	40	0	S0-0	出検印字	431	0	CH-0	本体テープ貼付	61	0	K0-0

9002

TOTAL 1470(RU) PF 86.0% TOTAL 1586(RU) PF 92.6% TOTAL 1795(RU) PF 105.0% TOTAL 1483(RU) PF 86.8% TOTAL 1656(RU) PF 96.9%

3000
2250
1500
750
0

S11 S12 S13 S14 S15

PROVISIONAL

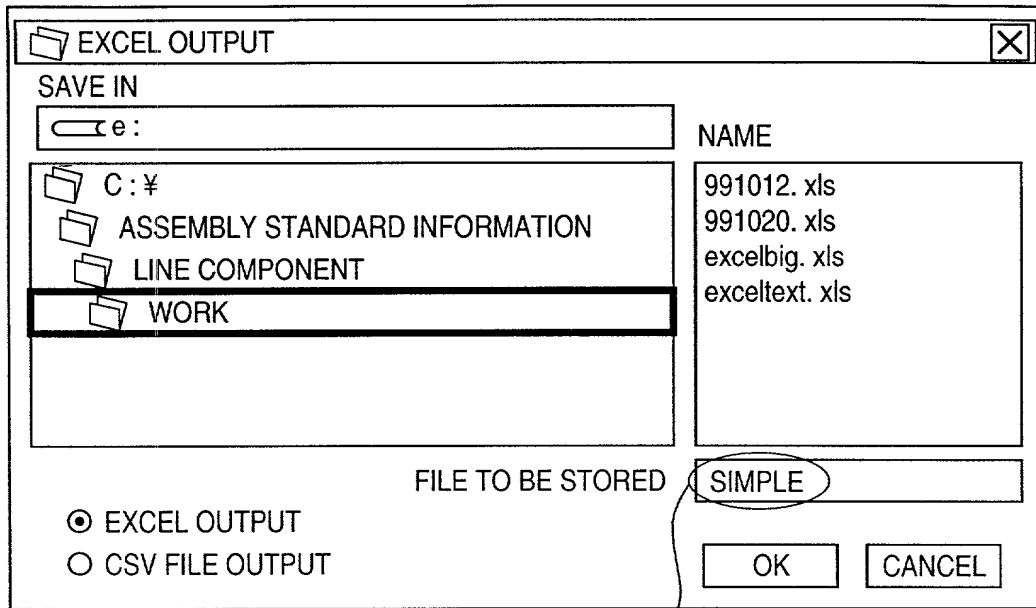
G STANDARD NO. WORK NAME WF MANUAL MACHINE MANHOUR REMARKS

COMPOSITION MODE: PRIORITY ORDER SCHEME

COMPOSITION EFFICIENCY 93.14 %

NET COMPOSITION EFFICIENCY %

tp
tp * 1.05
tp * 0.85
t

FIG. 107

The dialog box is titled "EXCEL OUTPUT" and has a close button (X) in the top right corner. It is divided into several sections:

- SAVE IN:** A text field containing "e:".
- Directory List:** A list of folders: "C:¥", "ASSEMBLY STANDARD INFORMATION", "LINE COMPONENT", and "WORK". The "WORK" folder is highlighted with a thick border.
- NAME:** A list of file names: "991012. xls", "991020. xls", "excelbig. xls", and "exceltext. xls".
- FILE TO BE STORED:** A text field containing "SIMPLE", which is circled.
- Output Type:** Two radio buttons: "EXCEL OUTPUT" (selected) and "CSV FILE OUTPUT".
- Buttons:** "OK" and "CANCEL" buttons at the bottom right.

10001

FIG. 108

11002

EXECUTION OF MACRO PROGRAM

LOOK UP MACRO NAME(M)

CREATE SIMULATED TRIAL COOPERATION TABLE

CREATE/PRINT LIST

CREATE/DISPLAY LIST

CREATE/PRINT PROCESS TABLE

CREATE/DISPLAY PROCESS TABLE

CREATE/DISPLAY PROCESS TABLE (A4 LANDSCAPE)

CREATE/DISPLAY NOTE LIST

CREATE/DISPLAY COMPOSITION LIST INCLUDING PARTS/TOOLS

CREATE COMPOSITION GRAPH DATA

CREATE COMPOSITION BAR GRAPH

11001

EXTRACT DATA

DESCRIPTION

START(R)

CANCEL

STEP(S)

EDIT(E)

DELETE(D)

OPTION(O)

FIG. 109

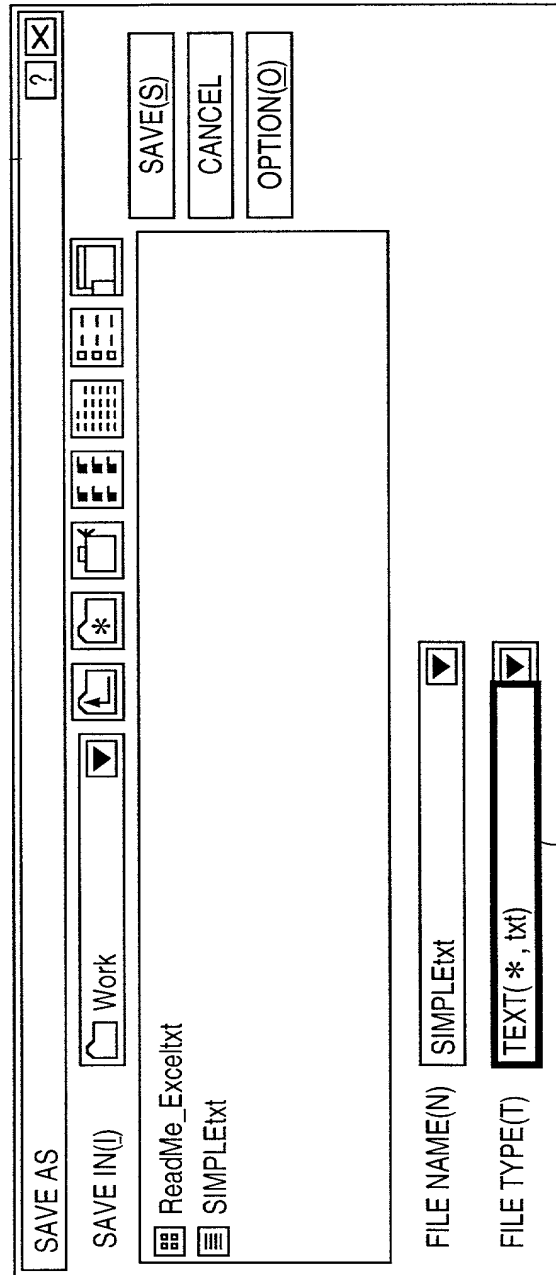


FIG. 111

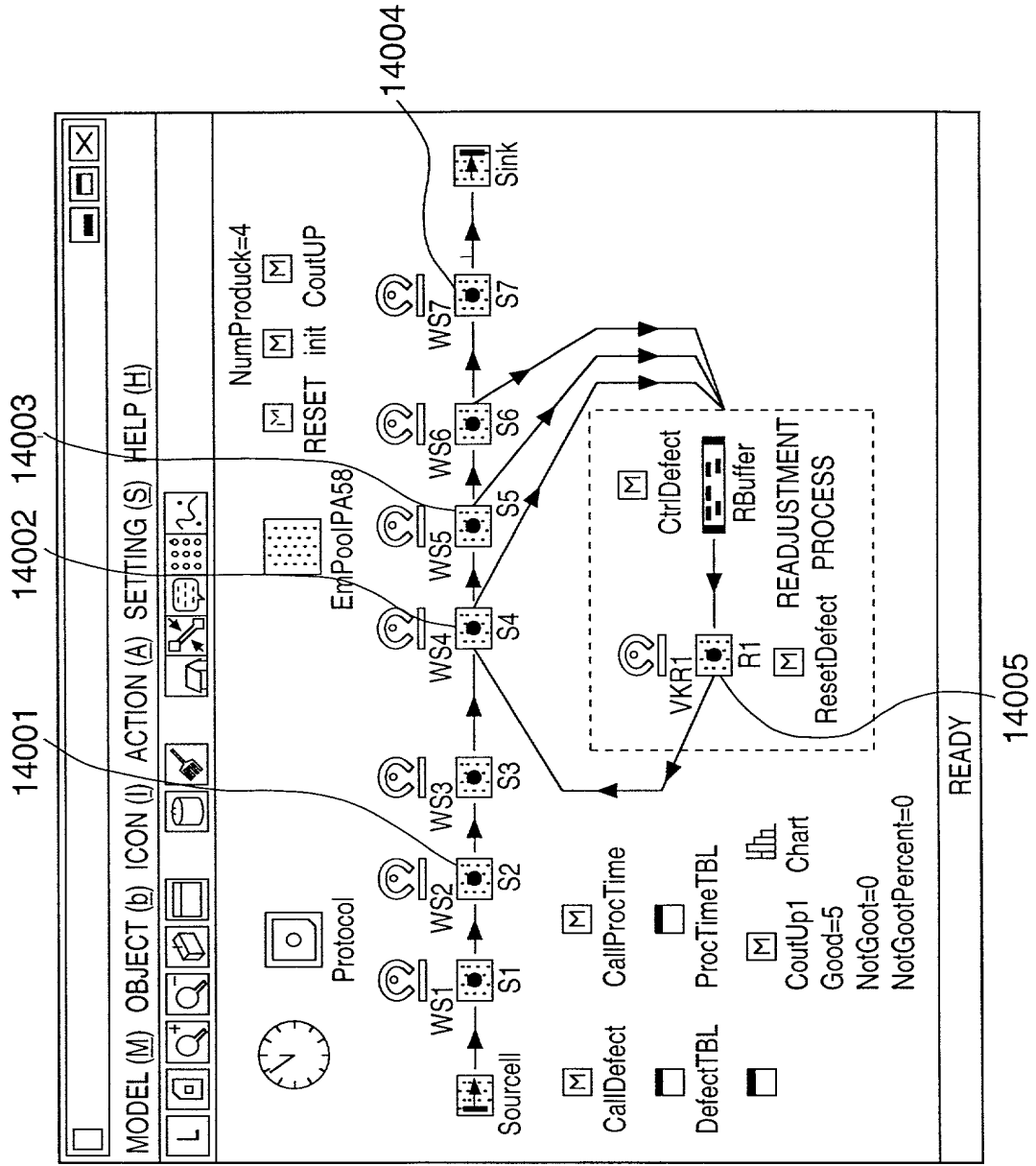


FIG. 112

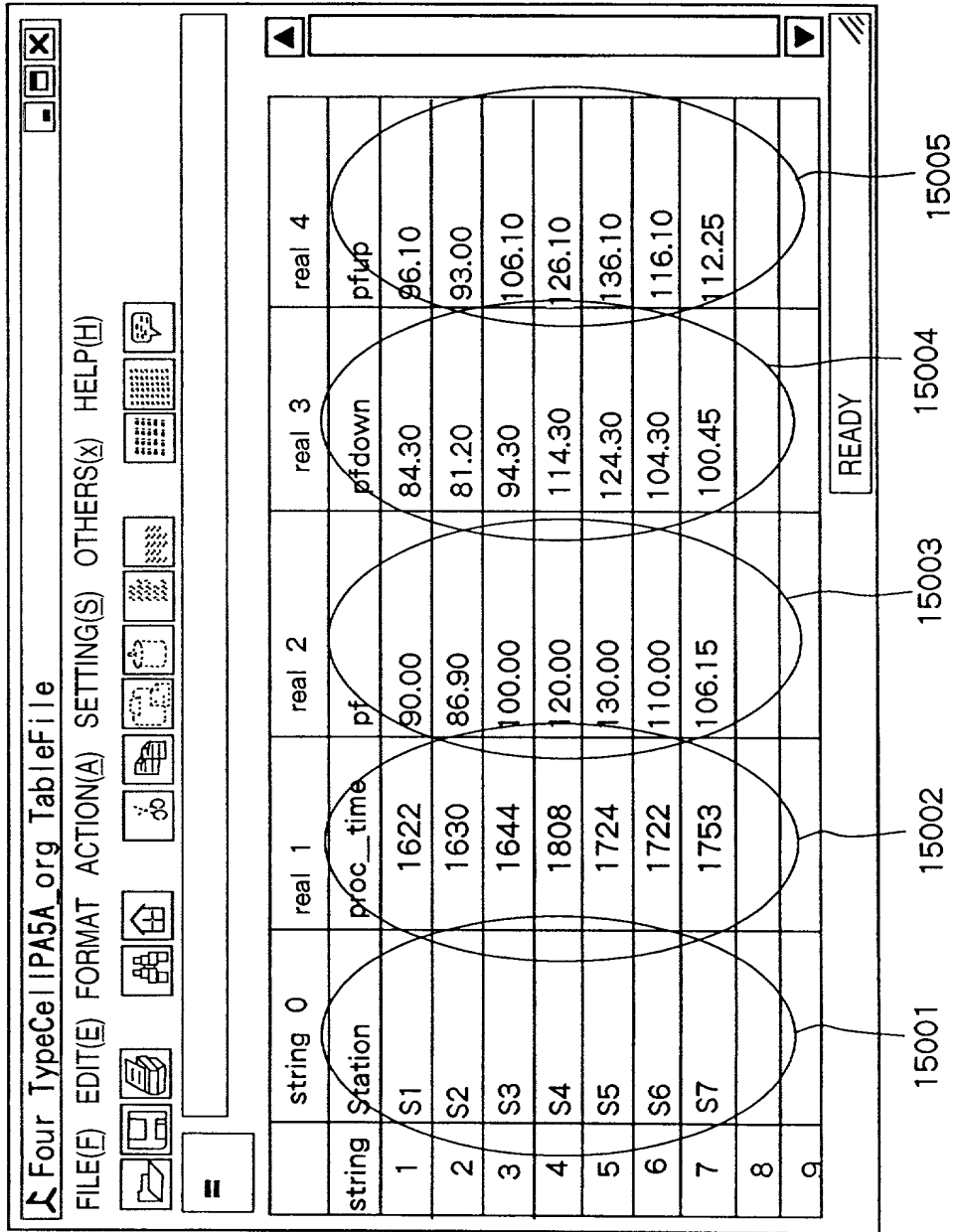
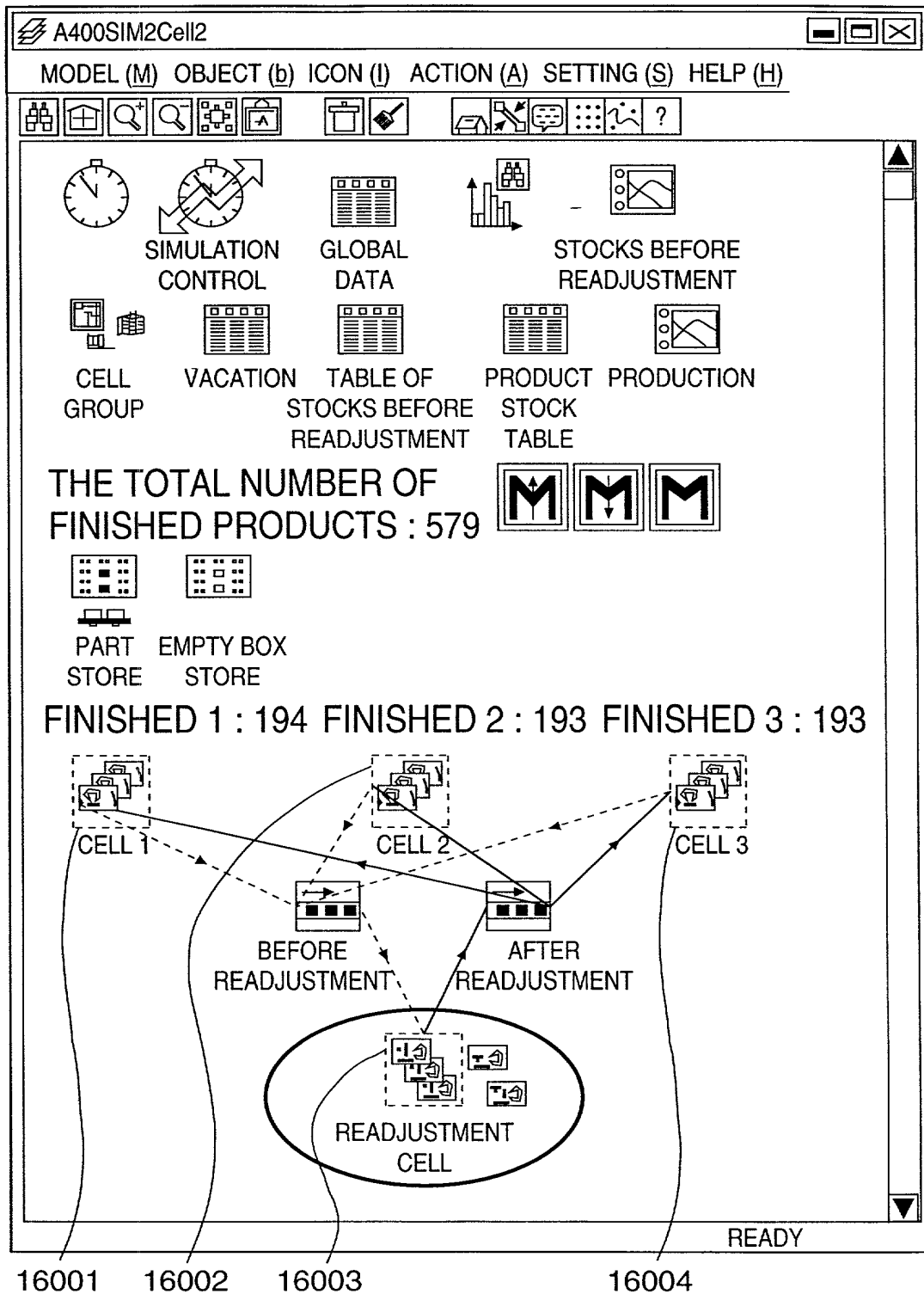


FIG. 113

[illegible]17002

FIG. 114B

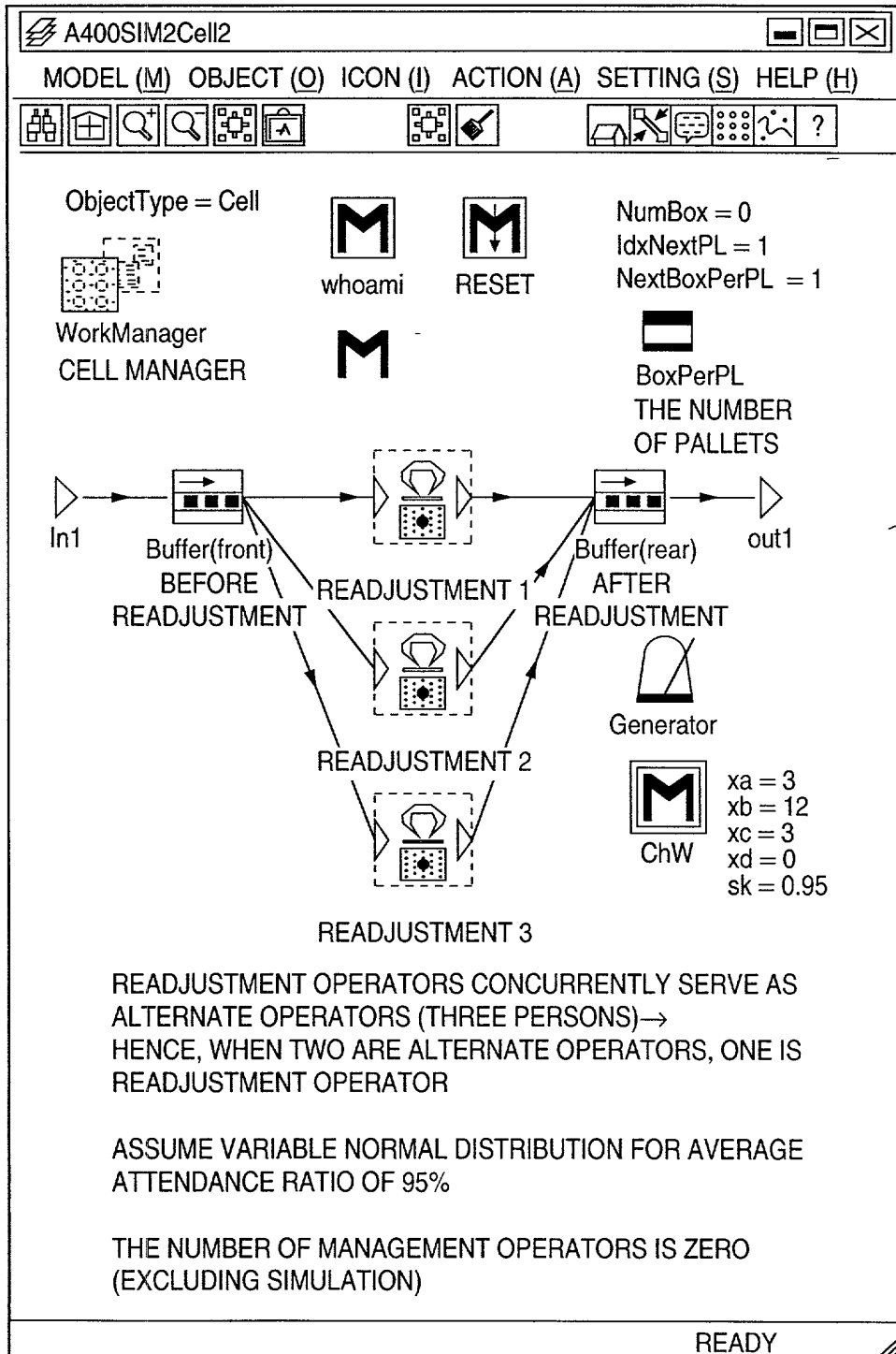


FIG. 115

SIMPLEEXtxt-MEMO PAD							
FILE(F) EDIT(E) SEARCH(S) HELP(H)							
Station	ProcTimeRU	pf	pfLower	pfUpper	WalkTimeRU1	WalkTimeRU2	BufSize1
Station 1	1622	90	84	96	0	0	
Station 2	1630	87	81	93	0	0	
Station 3	1644	100	94	106	0	0	
Station 4	1808	120	114	126	0	0	
Station 5	1724	130	124	136	0	0	
Station 6	1722	110	104	116	0	0	
Station 7	1753	106	100	112	0	0	
18001	18002	18003	18004	18005			

FIG. 116

19010

19005 ☐ CORRECTION OF COMPOSITION DATA

19006 ☐ FILE(F) ☐ EDIT(E) ☐ VIEW(V) ☐ TOOL(T) ☐ AVERAGE (PF-CONSIDERED) ☐ AVERAGE(AUTO) ☐ SEARCH/AVERAGE (AUTO) ☐ DIVIDE AT ONCE ☐ S13

19007 ☐ AVERAGE(PF-CONSIDERED) ☐ SEARCH ☐ DEVIDE AT ONCE ☐ S14 ☐ S15

19008 ☐ INPUT PROCESS PF

PROCESS NO.	CURRENT PROCESS MANHOUR	SET PF VALUE	tp * PF	OPERATOR NAME
S11	1755RU	90%	1544RU	
S12	1599RU	87%	1493RU	
S13	1474RU	100%	1716RU	
S14	2000RU	120%	2059RU	
S15	1600RU	130%	2231RU	
S16	1663RU	110%	1888RU	
S17	1812RU	106%	1819RU	

紙間調整 紙間調整 紙間調整

19009 ☐ FULL GRAPH DISPLAY ☐ RE-VIEW ☐ CLOSE

AVERAGING RATIO = 145%

2000
1500
1000
500
0

1 2 3 4 5 6 7

COMPOSITION MODE

PRIORITY ORDER SCHEME

PROVISIONAL MANHOUR REMARKS

MACHINE MANHOUR COMPOSITION EFFICIENCY 93.14 %

NET COMPOSITION EFFICIENCY %

TOTAL 1470(RU) TOTAL 1586(RU) TOTAL 1795(RU) TOTAL 1483(RU) TOTAL 1656(RU)

PF 105.0% PF 86.8% PF 96.9%

0 MIN PASSED

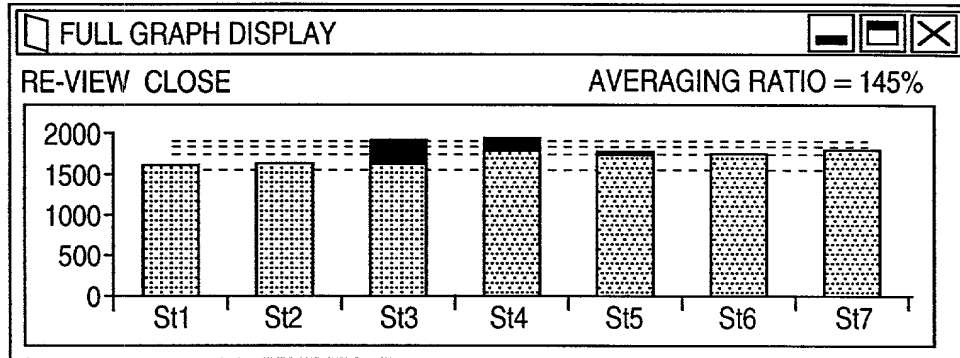
DISPLAY OF AVERAGING STATE

STOP

(SELECT STOP BUTTON TO CANCEL AVERAGING AND DISPLAY COMPOSITION DATA CORRECTION WINDOW IN THAT STATE)

FIG. 117A

BEFORE PF-CONSIDERED AUTOMATIC AVERAGING

**FIG. 117B**

AFTER PF-CONSIDERED AUTOMATIC AVERAGING

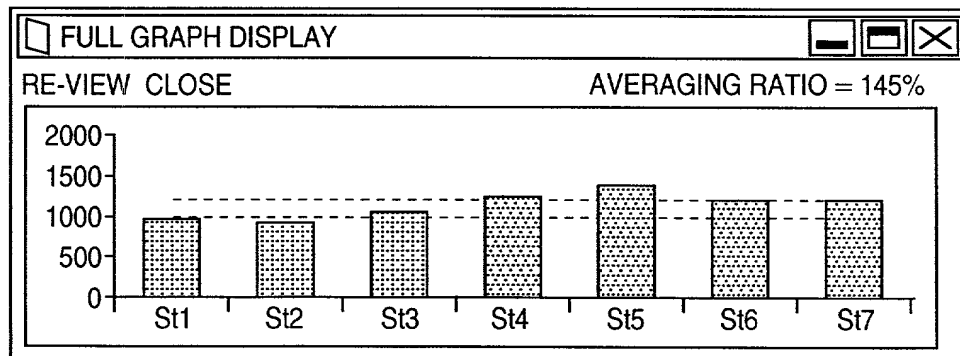


FIG. 118A

FIG. 118A

BEFORE PF-CONSIDERED
AUTOMATIC AVERAGING

INPUT PROCESS PF

PROCESS NO.	CURRENT PROCESS MANHOURL	SET PF VALUE	tp * PF	OPERATOR NAME
S11	1755RU	90%	1544RU	
S12	1599RU	87%	1493RU	
S13	1474RU	100%	1716RU	
S14	2000RU	120%	2059RU	
S15	1600RU	130%	2231RU	
S16	1633RU	110%	1888RU	
S17	1812RU	106%	1819RU	

20001 20002 20003 20004 20005 20006

OK CANCEL

FIG. 118B

AFTER PF-CONSIDERED
AUTOMATIC AVERAGING

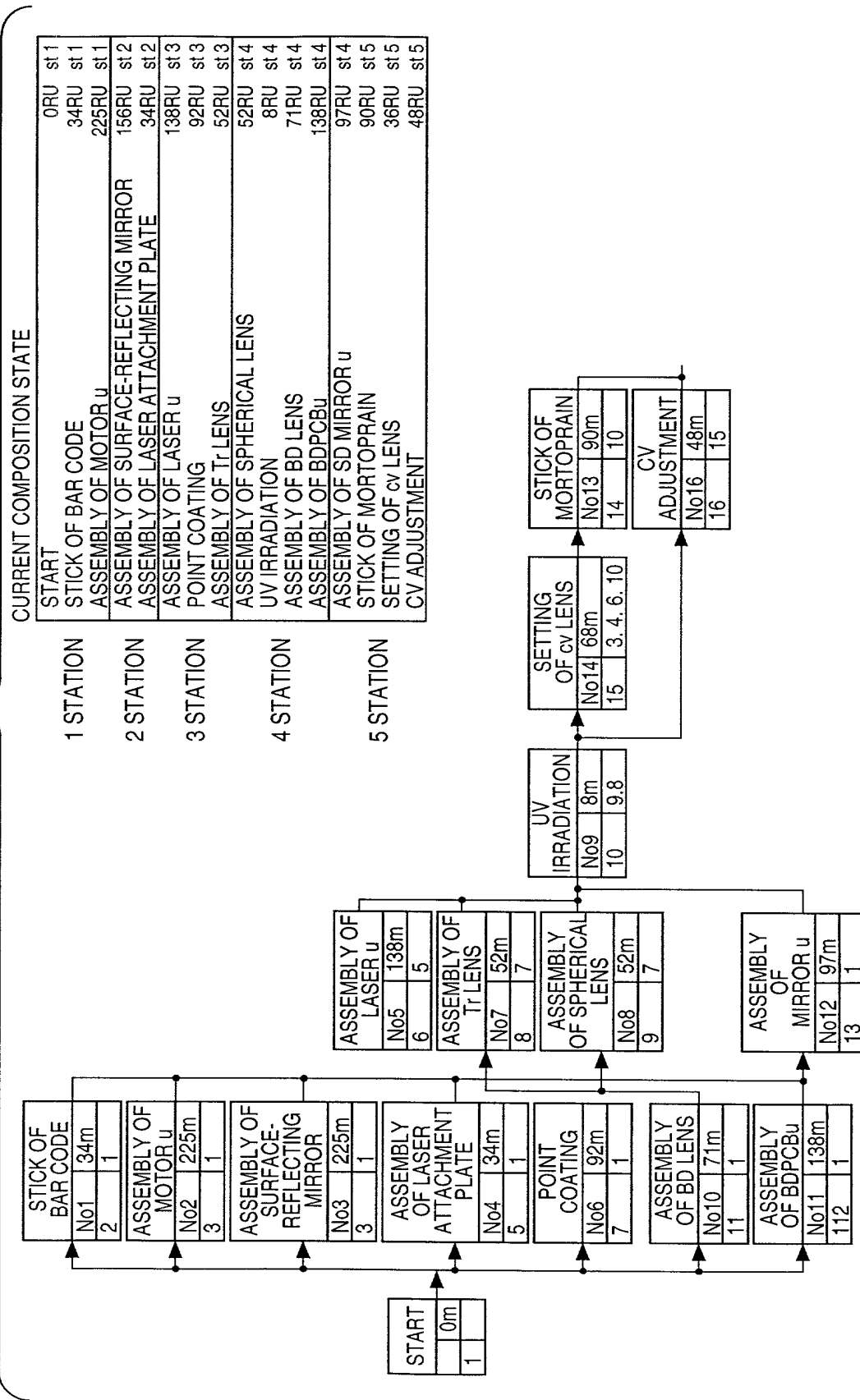
INPUT PROCESS PF

PROCESS NO.	CURRENT PROCESS MANHOURL	SET PF VALUE	tp * PF	OPERATOR NAME
S11	1428RU	90%	1544RU	
S12	1380RU	87%	1493RU	
S13	1594RU	100%	1716RU	
S14	1936RU	120%	2059RU	
S15	2075RU	130%	2231RU	
S16	1737RU	110%	1888RU	
S17	1753RU	106%	1819RU	

STANDARD MANHOURL OF STATION AFTER PF-CONSIDERED AUTOMATIC AVERAGING

OK CANCEL

FIG. 119



123/143

FIG. 120

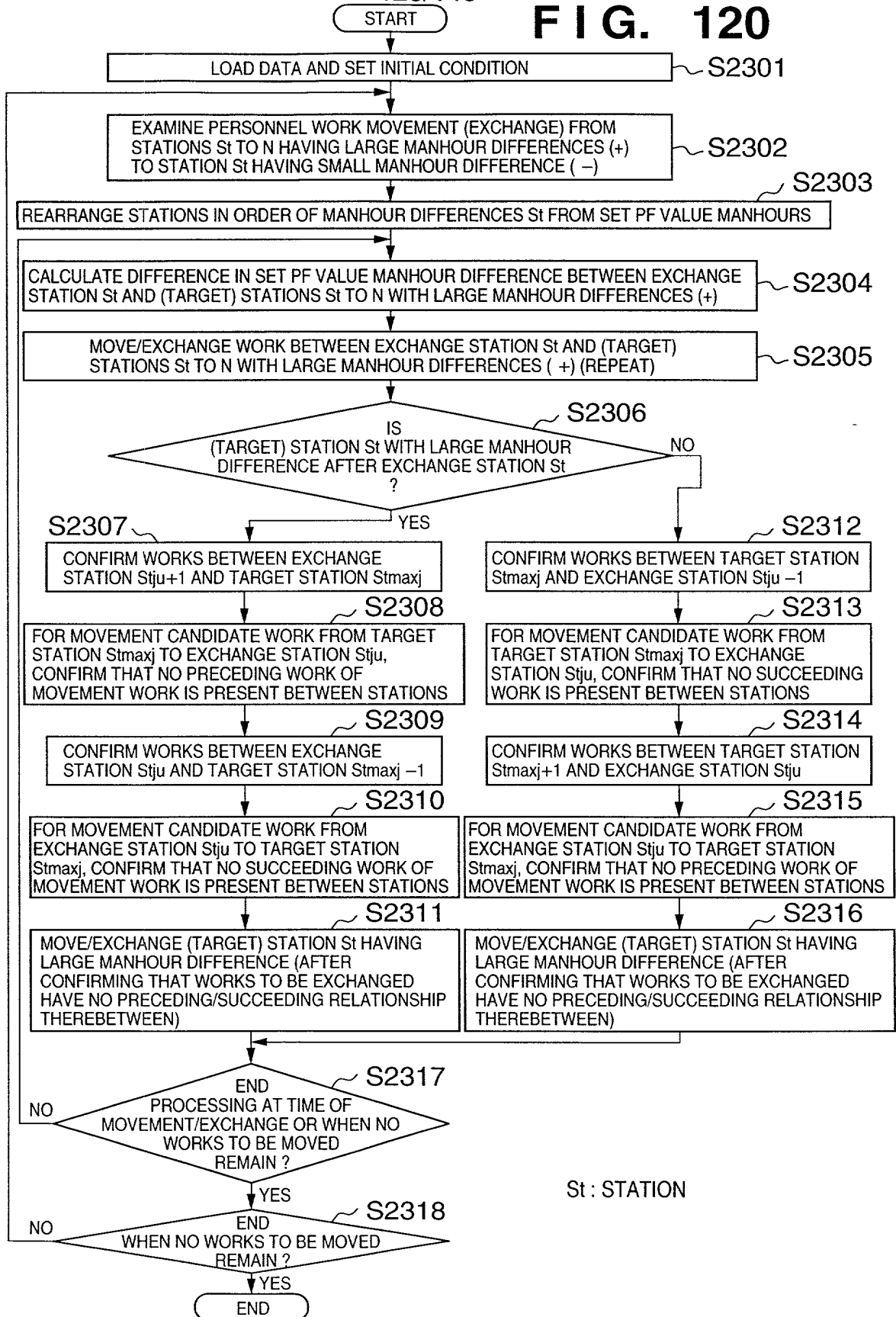


FIG. 121

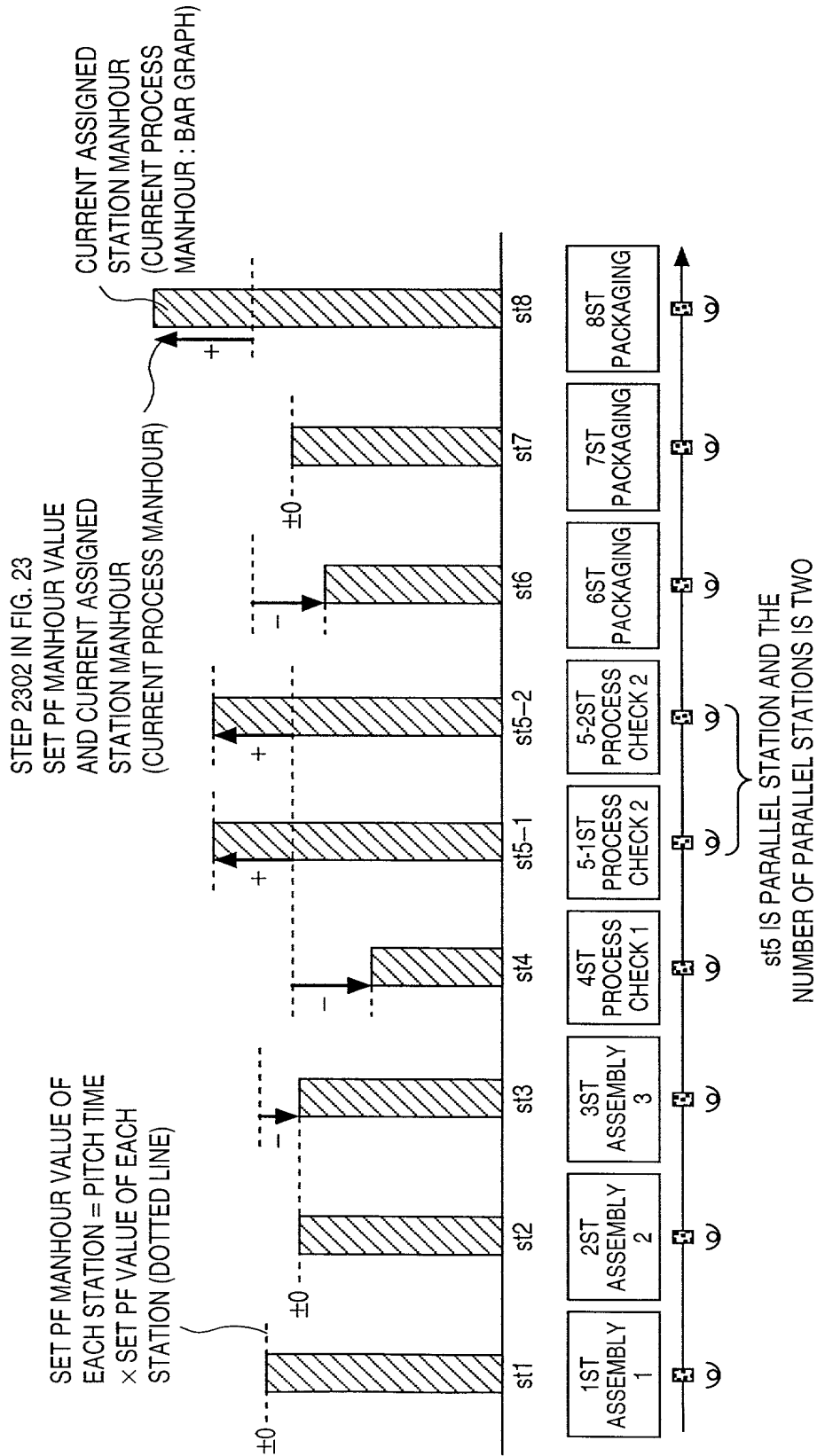


FIG. 122

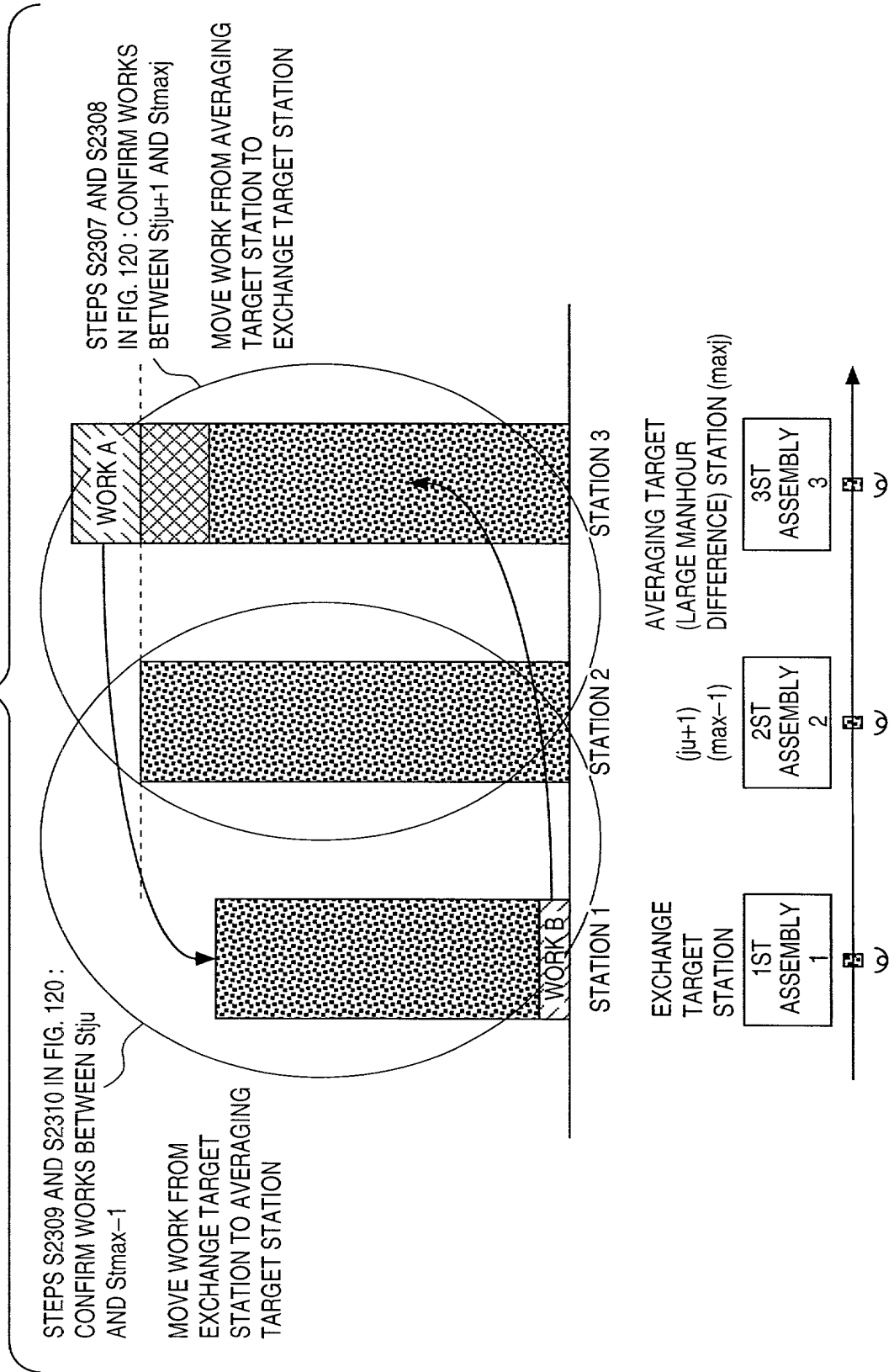
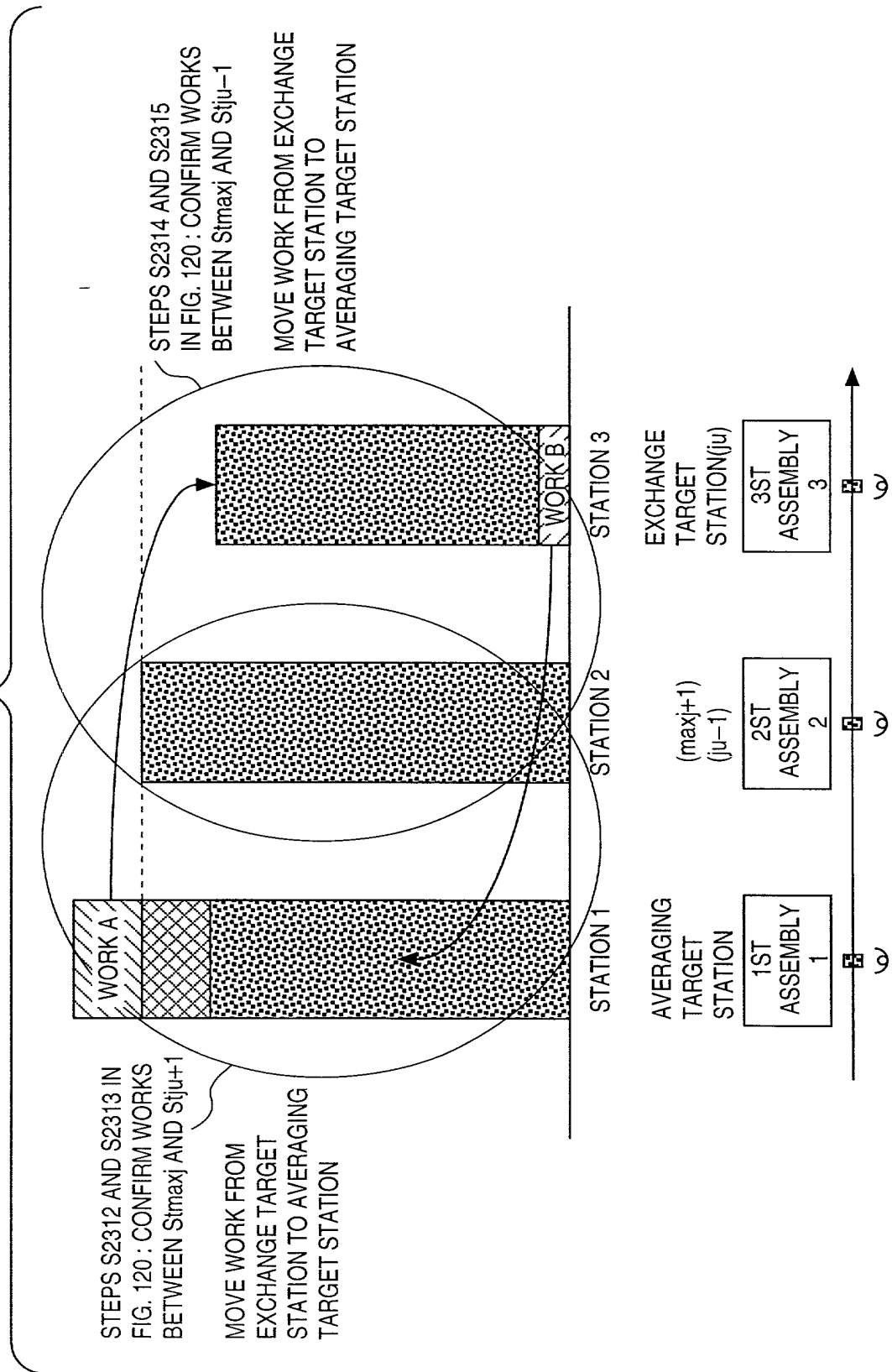


FIG. 123



32706	32709	32707	32708
-------	-------	-------	-------

FIG. 125

CORRECTION OF COMPOSITION DATA

FILE(E) EDIT(E) VIEW(D) TOOL(I)

28001

S11		S12		S13		S14		S15	
WORK NAME	WF	PROVI-SIONAL MAN-HOUR	STAN-DARD	MANUAL	WORK NAME	WF	PROVI-SIONAL MAN-HOUR	STAN-DARD	MANUAL
単位 名称 s1	579	0	9000		単位 名称 u8	110	0	9000	
単位 名称 s2	54	0	9000		単位 名称 u9	144	0	9000	
単位 名称 s6	21	0	9000		単位 名称 u20	118	0	9000	
単位 名称 s7	32	0	9000		単位 名称 m1	31	0	9000	
単位 名称 m12	73	0	9000		単位 名称 u15	35	0	9000	
単位 名称 m13	16	0	9000		単位 名称 u16	56	0	9000	
単位 名称 i5	68	0	9000		単位 名称 u31	128	0	9000	
単位 名称 i6	81	0	9000		単位 名称 u32	40	0	9000	
TOTAL 1192(RU)	PF 85.3%	TOTAL 1200(RU)	PF 85.9%	TOTAL 1197(RU)	PF 85.7%	TOTAL 1182(RU)	PF 84.6%	TOTAL 1169(RU)	PF 83.7%

28002

1500
1200
900
600
300
0

1 2 3 4 5

PROVISIONAL

G STANDARD NO. WORK NAME WF MANUAL MACHINE MANHOUR REMARKS

--- tp
--- tp * 1.05
--- tp * 0.85
--- t

COMPOSITION MODE : PRIORITY ORDER SCHEME

COMPOSITION EFFICIENCY 85.22 %
NET COMPOSITION EFFICIENCY %

FIG. 126

EXCEL OUTPUT

SAVE IN

e:

C:\

ASSEMBLY STANDARD INFORMATION

LINE COMPONENT

WORK

NAME

991012.xls

991020.xls

excelbig.xls

exceltext.xls

FILE TO BE STORED

SIMPLE

☒ EXCEL OUTPUT

☐ CSV FILE OUTPUT

OK

CANCEL

29001

FIG. 127

EXECUTION OF MACRO PROGRAM

LOOK UP MACRO NAME(M)

CREATE SIMULATED TRIAL COOPERATION TABLE

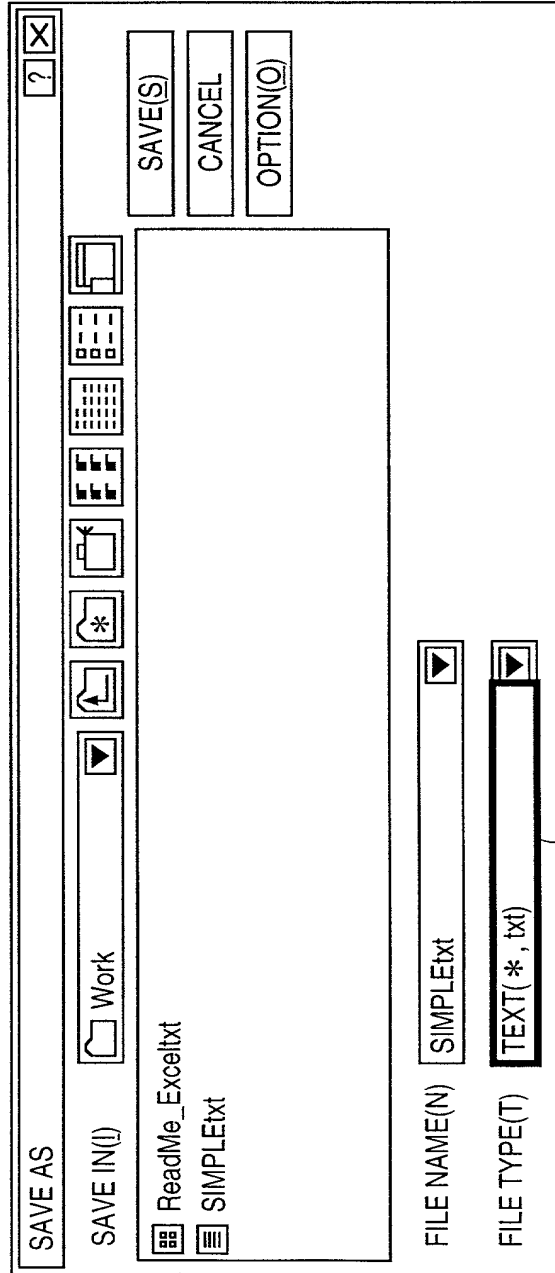
CREATE/PRINT LIST
CREATE/DISPLAY LIST
CREATE/PRINT PROCESS TABLE
CREATE/DISPLAY PROCESS TABLE
CREATE/DISPLAY PROCESS TABLE (A4 LANDSCAPE)
CREATE/DISPLAY NOTE LIST
CREATE/DISPLAY COMPOSITION LIST INCLUDING PARTS/TOOLS
CREATE COMPOSITION GRAPH DATA
CREATE COMPOSITION BAR GRAPH
EXTRACT DATA

DESCRIPTION

START(R)
CANCEL
STEP(S)
EDIT(E)
DELETE(D)
OPTION(O)

30001

FIG. 128



31001

32001 32002 32003 32004 32005

The screenshot shows a window titled "SIMPLE1.osv-word pad". The menu bar includes "FILE(E)", "EDIT(E)", "VIEW(V)", "INSERT(I)", "FORMAT(O)", and "HELP(H)". The toolbar contains icons for file operations (open, save, print, delete), editing (undo, redo, copy, paste), and viewing (zoom, scroll). The main display area contains a table with 10 rows, each representing a station. The columns are labeled "Station", "Proc", "Time", "RU", "pt", "pfLower", "pfUpper", "WalkTimeRU1", "WalkTimeRU2", "BufSize1", and "BufSize2". The data for each station is as follows:

Station	Proc	Time	RU	pt	pfLower	pfUpper	WalkTimeRU1	WalkTimeRU2	BufSize1	BufSize2
Station 1	1192	85	85	85	0, 0, 0, 0					
Station 2	1200	85	85	85	0, 0, 0, 0					
Station 3	1197	85	85	85	0, 0, 0, 0					
Station 4	1182	85	85	85	0, 0, 0, 0					
Station 5	1169	85	85	85	0, 0, 0, 0					
Station 6	1202	85	85	85	0, 0, 0, 0					
Station 7	1189	85	85	85	0, 0, 0, 0					
Station 8	1160	85	85	85	0, 0, 0, 0					
Station 9	1180	85	85	85	0, 0, 0, 0					
Station 10	1206	85	85	85	0, 0, 0, 0					

At the bottom of the window, there is a status bar that reads "PRESS F1 TO SEE HELP".

FIG. 131

	FIRST MONTH	SECOND MONTH	THIRD MONTH	FROM FOURTH MONTH
34001 THE EXPECTED NUMBER OF PRODUCTS (U1)	72 UNITS	120 UNITS	168 UNITS	240 UNITS
34002 EXPECTED NONADJUSTED RATIO (a) (THE NUMBER U2 OF DEFECTIVE PRODUCTS)	70% 31 UNITS	80% 30 UNITS	90% 191 UNITS	99.9% 0 UNITS
34003 NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE (U)	103 UNITS	150 UNITS	187 UNITS	240 UNITS
34004 EXPECTED STOP TIME (HI) (LOSS RATIO (F%))	60 MIN (14%)	50 MIN (12%)	45 MIN (10%)	0 MIN (14%)
34005 EXPECTED COMPOSITION EFFICIENCY (E)	60% (50%~70%)	75% (70%~80%)	85% (80%~95%)	60% (95%~95%)
34006 EXPECTED PRODUCTION RATIO (E)	30%	50%	70%	100%

COMPOSITION CONDITIONS FOR FIRST MONTH (EXPECTED NONADJUSTED RATIO 70%,
EXPECTED STOP TIME 60 MIN, AND EXPECTED COMPOSITION EFFICIENCY 50%)

INPUT OF COMPOSITION DATA							
FILE(E) EDIT(E) TOOL(T) CHANGE WORK ORDER(M) OPTION(O)							
COMPOSITION DATA TARGET FILE NAME MODEL (COMPOSITION NAME)		REVISION NUMBER G		<input type="radio"/> WORK <input type="radio"/> TOOL <input type="radio"/> PART <input type="radio"/> NOTE			
PER1000 PERFORMANCE COOPERATION		01		COMPOSITION PRIORITY MODE ORDER SCHEME			
GNO.	STANDARD NO.	WORK NAME	WF MANHOUR	MACHINE MANHOUR	PROVISIONAL SECTION COMPONENT REMARKS		
G SERIAL NO.	WORK STANDARD NO.	WORK NAME	WF MANHOUR	MACHINE MANHOUR	COMPONENT NAME	COMPONENT NO.	PREVIOUS
1	1	900000000000000000E1 単位名称s1	579	579	セツト	1	
1	2	900000000000000000E2 単位名称s2	54	54	セツト	2	1
1	3	900000000000000000E3 単位名称s3	10	10	セツト	3	2
1	4	900000000000000000E4 単位名称s4	50	50	セツト	4	3
1	5	900000000000000000E5 単位名称u1	63	63	ユニヅト	5	4
1	6	900000000000000000E6 単位名称u2	30	30	ユニヅト	6	4
1	7	900000000000000000E7 単位名称u3	156	156	ユニヅト	7	6
1	8	900000000000000000E8 単位名称u4	35	35	ユニヅト	8	4
1	9	900000000000000000E9 単位名称u5	162	162	ユニヅト	9	8
27	27	900000000000000000E27 単位名称u23	55	55	ユニヅト	27	22
28	28	900000000000000000E28 単位名称u24	86	86	ユニヅト	28	27
29	29	900000000000000000E29 単位名称u25	147	147	ユニヅト	29	4
30	30	900000000000000000E30 単位名称u26	52	52	ユニヅト	30	26
31	31	900000000000000000E31 単位名称u27	55	55	ユニヅト	31	30
32	32	900000000000000000E32 単位名称u28	203	203	ユニヅト	32	28
33	33	900000000000000000E33 単位名称u29	66	66	ユニヅト	33	31
34	34	900000000000000000E34 単位名称u30	36	36	ユニヅト	34	33
TOTAL:			141	TOTAL: 11903 (RU)			
THE NUMBER OF WORKS IN COMPOSITION:						141	(RU)
TOTAL MANHOUR IN COMPOSITION:						11903	(RU)
TOTAL MANHOUR OUTSIDE COMPOSITION:						0	(RU)
TOTAL MANHOUR OUTSIDE WORKSHOP:						0	(RU)

INPUT DATA		OUTPUT DATA	
THE EXPECTED NUMBER OF PRODUCTS:	72 UNITS	STATION (ROUND DOWN)	6 St
THE NUMBER OF DEFECTIVE PRODUCTS:	31 UNITS	COMPOSITION EFFICIENCY	55%
THE NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE:	103 UNITS	STATION (ROUND UP)	7 St
WORKING TIME:	450 MIN	COMPOSITION EFFICIENCY	47%
BREAK TIME:	15 MIN	THE NUMBER OF STATIONS	7 St
MORNING MEETING TIME:	1 MIN	COMPOSITION EFFICIENCY	47%
EXERCISE TIME:	5 MIN	CALCULATION RESULT	
LINE STOP TIME:	60 MIN	THE NUMBER OF STATIONS	6.6 St
OTHERS:	0 MIN	PITCH TIME (tp)	3582.52 RU
OPERATION TIME:	360 MIN		
EXPECTED COMPOSITION EFFICIENCY:	50% <input type="button" value="CALCULATE"/>		

COMPOSITION CONDITIONS FOR SECOND MONTH (EXPECTED NONADJUSTED RATIO 80%, EXPECTED STOP TIME 50 MIN, AND EXPECTED COMPOSITION EFFICIENCY 70%)

<div><div></div><div></div><div></div></div> INPUT OF COMPOSITION DATA									
FILE(E) EDIT(E) TOOL(T) CHANGE WORK ORDER(M) OPTION(O)									
COMPOSITION DATA TARGET FILE NAME _____ MODEL (COMPOSITION NAME) _____			REVISION NUMBER G _____		WORK ○ TOOL ○ PART ○ NOTE COMPOSITION PRIORITY MODE ORDER SCHEME				
PER1000 PERFORMANCE COOPERATION [01]									
GNO.	STANDARD NO.	WORK NAME	WF	MANUAL MANHOUR	MACHINE MANHOUR	COMPONENT NAME	COMPONENT NO.	PREVIOUS	REMARKS
SERIAL NO.	WORK STANDARD NO.	WORK NAME	WF	MANHOUR	MANHOUR	NAME	NO.	▲	
1	1	[90000000000000000000000E] 単位名称s1		579	0	セツト	1		
1	2	[9000000000000000000002E] 単位名称s2		54	0	セツト	2	1	
1	3	[9000000000000000000003E] 単位名称s3		10	0	セツト	3	2	
1	4	[9000000000000000000004E] 単位名称s4		50	0	セツト	4	3	
1	5	[9000000000000000000005E] 単位名称u1		63	0	ユニツト	5	4	
1	6	[9000000000000000000006E] 単位名称u2		30	0	ユニツト	6	4	
1	7	[9000000000000000000007E] 単位名称u3		156	0	ユニツト	7	6	
1	8	[9000000000000000000008E] 単位名称u4		35	0	ユニツト	8	4	
1	9	[9000000000000000000009E] 単位名称u5		162	0	ユニツト	9	8	
27	27	[9000000000000000000027E] 単位名称u23		55	0	ユニツト	27	22	
28	28	[9000000000000000000028E] 単位名称u24		86	0	ユニツト	28	27	
29	29	[9000000000000000000029E] 単位名称u25		147	0	ユニツト	29	4	
30	30	[9000000000000000000030E] 単位名称u26		52	0	ユニツト	30	26	
31	31	[9000000000000000000031E] 単位名称u27		55	0	ユニツト	31	30	
32	32	[9000000000000000000032E] 単位名称u28		203	0	ユニツト	32	28	
33	33	[9000000000000000000033E] 単位名称u29		66	0	ユニツト	33	31	
34	34	[9000000000000000000034E] 単位名称u30		36	0	ユニツト	34	33	
				TOTAL:		[11903]		(RU)	
THE NUMBER OF WORKS IN COMPOSITION: [141]									
TOTAL MANHOUR IN COMPOSITION: [11903] (RU) TOTAL MANHOUR OUTSIDE WORKSHOP: [0] (RU)									
TOTAL MANHOUR OUTSIDE COMPOSITION: [0] (RU)									

INPUT DATA

THE EXPECTED NUMBER OF PRODUCTS: [120] UNITS

THE NUMBER OF DEFECTIVE PRODUCTS: [30] UNITS

THE NUMBER OF INITIAL PRODUCTS INVESTED INTO TOP OF ASSEMBLY LINE: [150] UNITS

WORKING TIME: [450] MIN

BREAK TIME: [15] MIN

MORNING MEETING TIME: [1] MIN

EXERCISE TIME: [5] MIN

LINE STOP TIME: [50] MIN

OTHERS: [0] MIN

OPERATION TIME: [379] MIN

EXPECTED COMPOSITION EFFICIENCY: [70] %

CALCULATE

OUTPUT DATA

STATION (ROUND DOWN) [6] St

COMPOSITION EFFICIENCY [79] %

STATION (ROUND UP) [7] St

COMPOSITION EFFICIENCY [67] %

THE NUMBER OF STATIONS [7] St

COMPOSITION EFFICIENCY [67] %

CALCULATION RESULT

THE NUMBER OF STATIONS [6.7] St

PITCH TIME (tp) [2526.66] RU

EXECUTE COMPOSITION [END]

[illegible]

COMPOSITION CONDITIONS FOR FOURTH FOURTH (EXPECTED NONADJUSTED RATIO 100%,
AND EXPECTED COMPOSITION EFFICIENCY 95%)

COMPOSITION DATA					PROVISIONAL SECTION				
TARGET FILE NAME MODEL (COMPOSITION NAME)		REVISION NUMBER G		<input checked="" type="radio"/> WORK	<input type="radio"/> TOOL	<input type="radio"/> PART	<input type="radio"/> NOTE		
<input type="text"/>		<input type="text"/>		COMPOSITION MODE		PRIORITY ORDER SCHEME			
<input type="text"/>		<input type="text"/>		<input type="text"/>		<input type="text"/>			
GNO.	STANDARD NO.	WORK NAME	WF	MANUAL MACHINE	MACHINE MANHOURL	IN	SET	PREVIOUS	
1	90000000000000000001E	WORK STANDARD NO.	579	579	0	0			
G	SERIAL NO.	WORK NAME	WF	MANUAL MACHINE	MACHINE MANHOURL	COMPONENT NAME	COMPONENT NO.	PREVIOUS	
1	1	90000000000000000001E 單位名称s1	579	579	0	セツト	1		
1	2	90000000000000000002E 單位名称s2	54	54	0	セツト	2	1	
1	3	90000000000000000003E 單位名称s3	10	10	0	セツト	3	2	
1	4	90000000000000000004E 單位名称s4	50	50	0	セツト	4	3	
1	5	90000000000000000005E 單位名称u1	63	63	0	ユニヅト	5	4	
1	6	90000000000000000006E 單位名称u2	30	30	0	ユニヅト	6	4	
1	7	90000000000000000007E 單位名称u3	156	156	0	ユニヅト	7	6	
1	8	90000000000000000008E 單位名称u4	35	35	0	ユニヅト	8	4	
1	9	90000000000000000009E 單位名称u5	162	162	0	ユニヅト	9	8	
27	900000000000000000027E 單位名称u23	55	55	0	ユニヅト	27	27	22	
28	900000000000000000028E 單位名称u24	86	86	0	ユニヅト	28	28	27	
29	900000000000000000029E 單位名称u25	147	147	0	ユニヅト	29	29	4	
30	900000000000000000030E 單位名称u26	52	52	0	ユニヅト	30	30	26	
31	900000000000000000031E 單位名称u27	55	55	0	ユニヅト	31	31	30	
32	900000000000000000032E 單位名称u28	203	203	0	ユニヅト	32	32	28	
33	900000000000000000033E 單位名称u29	66	66	0	ユニヅト	33	33	31	
34	900000000000000000034E 單位名称u30	36	36	0	ユニヅト	34	34	33	
TOTAL:							11903	(RU)	

THE NUMBER OF WORKS IN COMPOSITION: 141 TOTAL: 11903 (RU) TOTAL MANHOURL OUTSIDE WORKSHOP: 0 (RU)

TOTAL MANHOURL IN COMPOSITION: 11903 (RU) TOTAL MANHOURL OUTSIDE WORKSHOP: 0 (RU)

TOTAL MANHOURL OUTSIDE COMPOSITION: 0 (RU)

FIG. 136

CORRECTION OF COMPOSITION DATA

FILE(E) EDIT(E) VIEW(V) TOOL(T)

☐ S11 ☐ S12 ☐ S13 ☐ S14 ☐ S15

WORK NAME	WF	PROV. SIONAL MAN- HOUR	STAN- DARD	MANUAL	WORK NAME	WF	PROV. SIONAL MAN- HOUR	STAN- DARD	MANUAL	WORK NAME	WF	PROV. SIONAL MAN- HOUR	STAN- DARD	MANUAL	WORK NAME	WF	PROV. SIONAL MAN- HOUR	STAN- DARD	MANUAL
単位 名称 s1	579	0	9000		単位 名称 u1	63				単位 名称 i16	61	0	9000		単位 名称 i39	15	0	9000	
単位 名称 s2	54	0	9000		単位 名称 u9	144				単位 名称 i17	63	0	9000		単位 名称 i40	8	0	9000	
単位 名称 u12	133	0	9000		単位 名称 u24	118													
単位 名称 u19	250	0	9000		単位 名称 u25	31													

☒ PROCESS PF DATA

PROCESS NO.	CURRENT PROCESS MANHOUR	SET PF VALUE	tp * PF	OPERATOR NAME
S11	1622RU	100%	1788RU	
S12	1630RU	100%	1788RU	
S13	1644RU	100%	1788RU	
S14	1808RU	100%	1788RU	
S15	1724RU	100%	1788RU	
S16	1722RU	100%	1788RU	
S17	1753RU	100%	1788RU	

TOTAL 1622(RU) PF 84.6% TOTAL 1724(RU) PF 96.4%

☐ FULL GRAPH DISPLAY ☐ RE-VIEW CLOSE

--- tp
 --- tp * 1.05
 --- tp * 0.85
 --- t

COMPOSITION EFFICIENCY 95.12 %
COMPOSITION EFFICIENCY %

FIG. 137

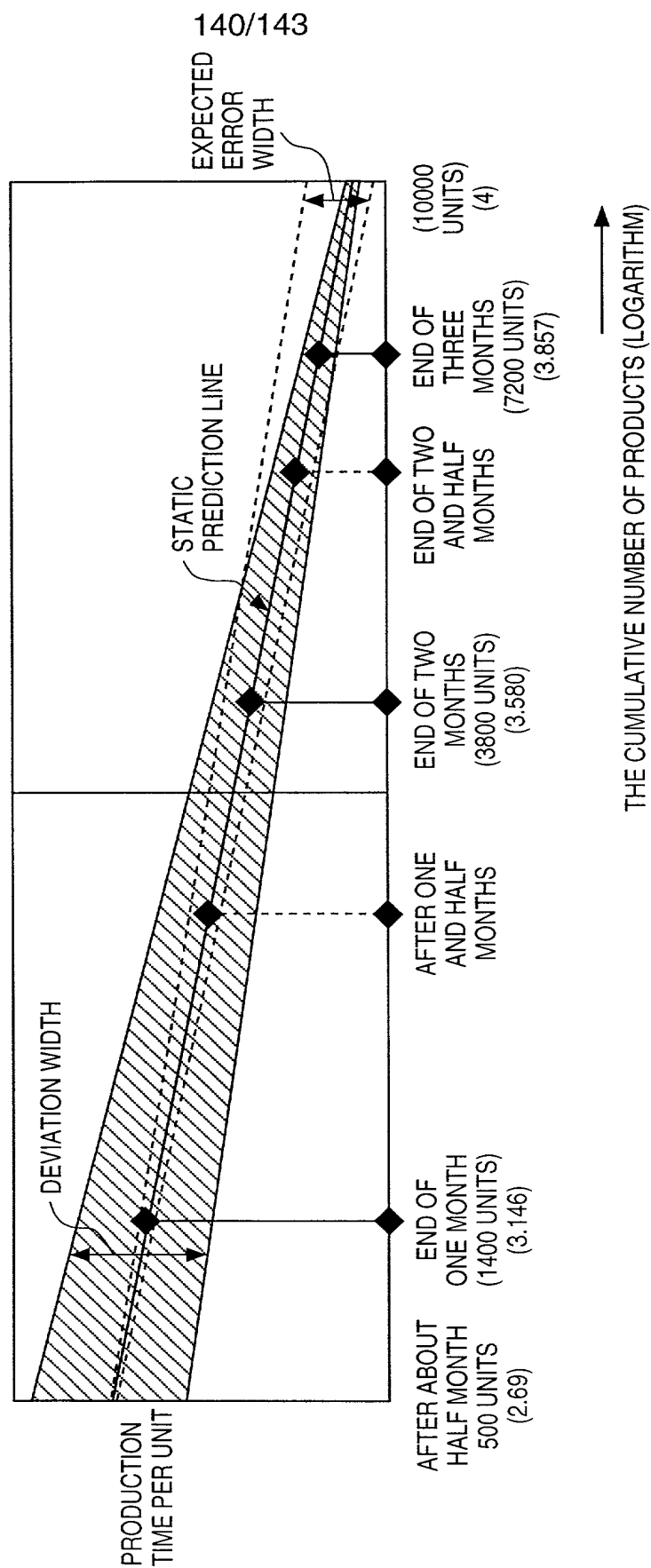


FIG. 138

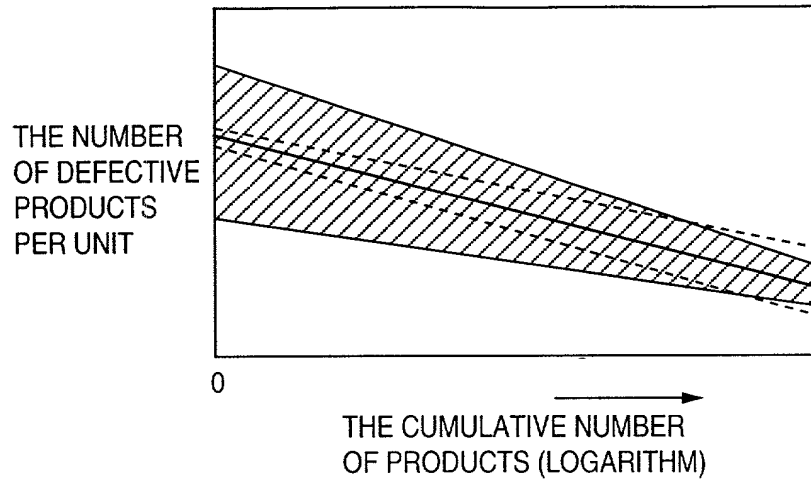


FIG. 139

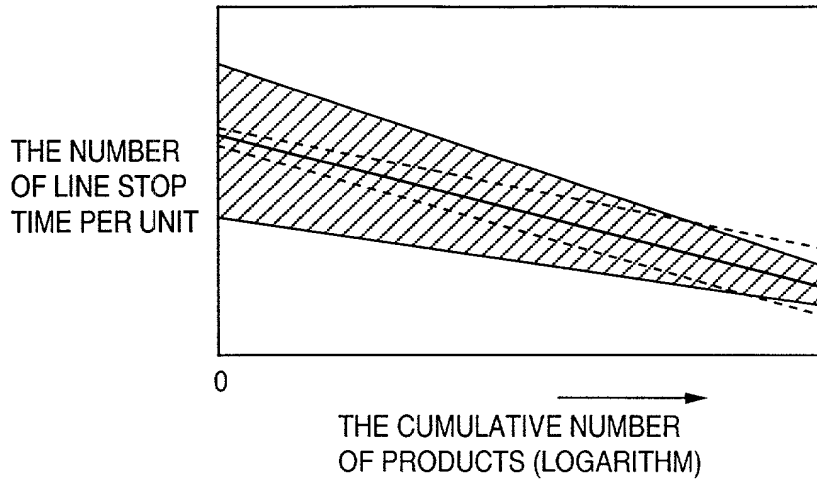


FIG. 140